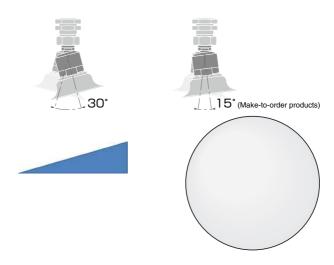


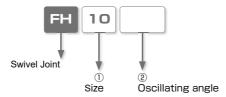


Vacuum Cup Ball Swiveling Attachment Swivel Joint

Suitable for lifting work-pieces with rounded or inclined surface



■ Model Designation (Example)



1 Swivel joint size

Code	10	20	60		
Cup size	ø10, ø15	ø20 ~ ø50,	ø60 ~ ø100		
(mm)	Ø 10, Ø 15	4×10 ~ 8×30			

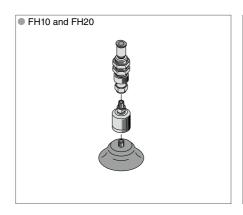
^{*} Joint size code "20" is applicable for cup size Ø10mm and Ø15mm for sponge series due to the structural reasons.

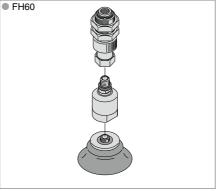
2 Oscillating angle

Code	No code	- 15			
Oscillating angle	30°	15° (option)			

Installing Method

Use a proper tool to tighten the knurling part of FH10 and FH20 or use a wrench to tighten the parallel cut part of FH60. Refer to the dimensional drawings of the parallel cut part.

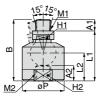




Swivel Joint

FH Swivel Joint

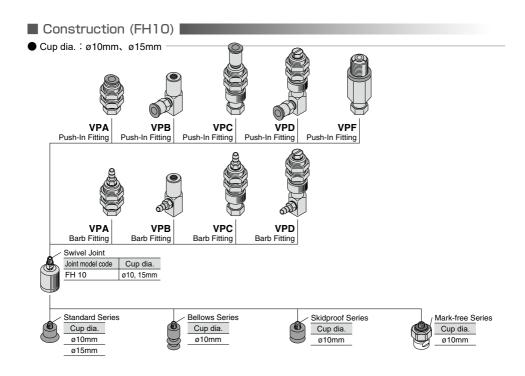




Unit: mm

Mode code	N/A	M2	A1	A2			L2	øΡ	Hex. H1	Hex. H2	Weight (g)	CAD file name
FH10	M4×0	.7 M4×0.7	3.4	7	23	19.6	11.1	15	4	_	9	\/\/D
FH20 🗌	M6×	1 M6×1	6	6.5	28.5	22.5	12.5	20	7	_	19.5	VVP- 229
FH60 □	M10×1	.5 M10×1.5	10	9.5	40.5	30.5	18.5	28	12	24	57.5	223

 $[\]divideontimes$ Fill in \square in Model code with "-15" for oscillating angle 15 degrees





Cup dia.

ø20mm

ø30mm

ø40mm

ø50mm

■ Construction (FH20) ● Cup dia.: ø10mm、ø15mm、ø20mm、ø25mm、ø30mm、ø40mm、ø50mm、4×10mm、 Oval cup: 4×20mm、4×30mm、5×10mm、5×20mm、5×30mm、6×10mm、6×20mm、6×30mm、 8×20mm、8×30mm VPA **VPC VPD VPB** Push-In Fitting Push-In Fitting Push-In Fitting Push-In Fitting Push-In Fitting **VPA VPB VPC** VPD Barb Fitting Barb Fitting Barb Fitting Barb Fitting Swivel Joint Joint model code Cup size Mark-free ø10, 15, 20, 25, 30, 35, 40, 50mm, Series Cup dia. 4×10, 4×20, 4×30, 5×10, FH 20 ø20mm 5×20, 5×30, 6×10, 6×20, ø30mm 6×30, 8×20, 8×30mm Oval Series Cup size Standard 4x10, 20, 30mm Series Sponge 5×10, 20, 30mm Cup dia Series 6×10, 20, 30mm ø20mm Cup dia. 8x20, 30mm ø25mm ø35mm Bellows Sponge Skidproof ø30mm ø50mm Series 8 ğ Series Series ø40mm

Cup dia.

ø10mm

ø15mm

ø20mm

ø25mm

ø30mm

ø50mm

Cup dia.

ø20mm

ø30mm

ø40mm

ø50mm

■ Construction (FH60) ● Cup dia.: ø60mm、ø70mm、ø80mm、ø100mm **VPB VPC** Parallel female thread Parallel female thread Parallel female thread Parallel female thread Swivel Joint Model code Cup dia. FH 60 ø60, 70, 80, 100mm Standard Series Cup dia. Sponge ø60mm Series Cup dia. ø70mm ø100mm Standard Series Bellows

Cup dia.

ø80mm ø100mm Series Cup dia.

ø80mm



Before using PISCO products, be sure to read "Safety Instructions" and "Safety Instruction Manual" and "Common Safety Instructions for Vacuum Series".

Warning

- Swivel Joint shall not be combined with non-PISCO brand vacuum cup and cup direct mounting filter.
 Do not use it for other purpose. Swivel Joint is designed for PISCO vacuum cup only. Thus wrong usage may cause damage to the product.
- When a work-piece is conveyed by a pad with Swivel Joint, consider the acceleration, impacts and wind pressure. Otherwise, there is a possibility of damaging the joint by the excessive load.
- 3. Avoid any excessive pressure on Swivel Joint. Otherwise, there is a possibility of damaging the joint.

Caution

- Pay special attention to the angle position of Swivel Joint. The angle position can be changed after sucking work-piece by work-piece weight and acceleration or impact during transportation.
- When Swivel Joint is attached or replaced, refer to the following recommended tightening torque to tighten the parallel cut part of the joint.
 - Table: Recommended tightening torque

Tightening torque				
0.5 ~ 0.6N·m				
1.5 ~ 2N⋅m				
5 ~ 8N·m				