

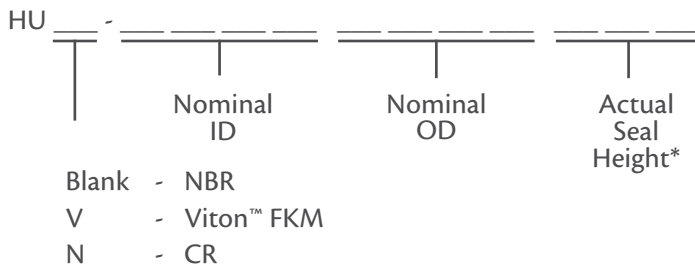
Materials	Temp. Range		
Nitrile (NBR)	-40°C	to	120°C
Viton™/Fluorocarbon (FKM)	-26°C	to	204°C
Chloroprene (CR)	-40°C	to	121°C
Silicone (VMQ)	-65°C	to	232°C
Ethylene Propylene (EPDM)	-54°C	to	150°C

Product Description

Homogenous U-cups (HU), also known as block vees, are non-loaded U-cups. They are a popular seal in low pressure applications where a low friction seal is beneficial. HU seals are most commonly used in pneumatic applications as a rod or piston seal. The design is suited for situations where space is limited. HU seals are typically made from 70A or 80A durometer NBR materials.

As pressure is applied to the HU, there is an increase in sealing force until the seal reaches the maximum pressure it is able to handle. These seals can withstand pressures of up to 250 PSI in pneumatic applications, and up to 1,250 PSI in hydraulic applications. Contact us if your application requires a higher pressure rating.

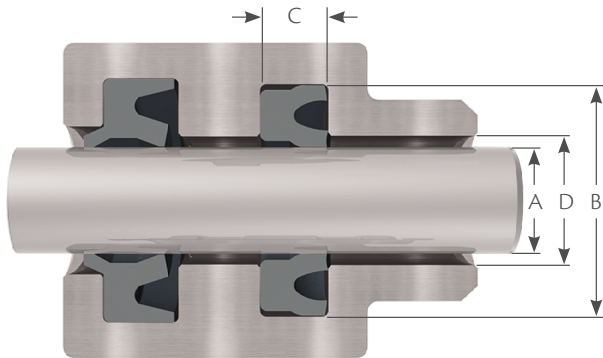
Part Numbers:



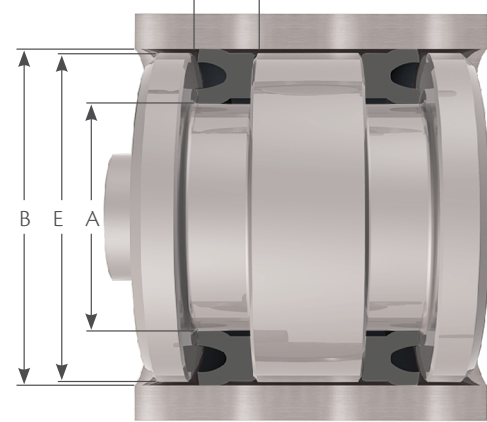
** Height is only listed if the axial height is greater than the cross-section.*

Example: HU 0375 0625 - Homogenous, U-Cup, NBR, 3/8" Nominal ID, 5/8" Nominal OD

Rod Gland



Piston Gland



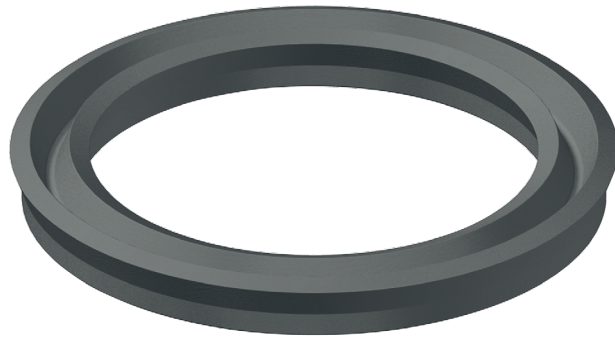
Homogenous U-Cups

Rod Gland Application

A Rod Diameter		Seal C/S	B Groove Diameter		C Groove Width +0.015/ -0.000	D Throat Diameter	
Range	Tolerance		Calculation	Tolerance		Calculation	Tolerance
0.125 - 0.249	+0.000/ -0.002	02/32 (0.062)	Dia. A + 0.125	+0.002/ -0.000	0.093	Dia. A + 0.001	+0.002/ -0.000
0.250 - 0.374	+0.000/ -0.002	03/32 (0.094)	Dia. A + 0.187	+0.002/ -0.000	0.125	Dia. A + 0.001	+0.002/ -0.000
0.375 - 1.124	+0.000/ -0.002	04/32 (0.125)	Dia. A + 0.250	+0.002/ -0.000	0.156	Dia. A + 0.001	+0.002/ -0.000
1.125 - 1.624	+0.000/ -0.002	05/32 (0.156)	Dia. A + 0.312	+0.002/ -0.000	0.188	Dia. A + 0.001	+0.002/ -0.000
1.625 - 3.249	+0.000/ -0.002	06/32 (0.187)	Dia. A + 0.375	+0.002/ -0.000	0.218	Dia. A + 0.001	+0.002/ -0.000
3.250 - 4.999	+0.000/ -0.003	08/32 (0.250)	Dia. A + 0.500	+0.003/ -0.000	0.281	Dia. A + 0.002	+0.003/ -0.000
5.000 - 5.499	+0.000/ -0.003	09/32 (0.281)	Dia. A + 0.562	+0.003/ -0.000	0.312	Dia. A + 0.002	+0.003/ -0.000
5.500 - 8.999	+0.000/ -0.003	10/32 (0.312)	Dia. A + 0.625	+0.004/ -0.000	0.344	Dia. A + 0.002	+0.003/ -0.000
9.000 +	+0.000/ -0.004	12/32 (0.375)	Dia. A + 0.750	+0.005/ -0.000	0.406	Dia. A + 0.002	+0.004/ -0.000

Piston Gland Application

B Bore Diameter		Seal C/S	A Groove Diameter		C Groove Width +0.015/ -0.000	E Piston Diameter	
Range	Tolerance		Calculation	Tolerance		Calculation	Tolerance
0.250 - 0.436	+0.002/ -0.000	02/32 (0.062)	Dia. B - 0.125	+0.000/ -0.002	0.093	Dia. B - 0.001	+0.000/ -0.001
0.437 - 0.624	+0.002/ -0.000	03/32 (0.094)	Dia. B - 0.187	+0.000/ -0.002	0.125	Dia. B - 0.001	+0.000/ -0.001
0.625 - 1.374	+0.002/ -0.000	04/32 (0.125)	Dia. B - 0.250	+0.000/ -0.002	0.156	Dia. B - 0.001	+0.000/ -0.001
1.375 - 1.749	+0.002/ -0.000	05/32 (0.156)	Dia. B - 0.312	+0.000/ -0.002	0.188	Dia. B - 0.001	+0.000/ -0.001
1.750 - 2.999	+0.002/ -0.000	06/32 (0.187)	Dia. B - 0.375	+0.000/ -0.002	0.218	Dia. B - 0.001	+0.000/ -0.002
3.000 - 3.999	+0.003/ -0.000	07/32 (0.219)	Dia. B - 0.437	+0.000/ -0.003	0.250	Dia. B - 0.001	+0.000/ -0.002
4.000 - 5.499	+0.003/ -0.000	08/32 (0.250)	Dia. B - 0.500	+0.000/ -0.003	0.281	Dia. B - 0.001	+0.000/ -0.002
5.500 - 6.999	+0.003/ -0.000	09/32 (0.281)	Dia. B - 0.562	+0.000/ -0.003	0.312	Dia. B - 0.002	+0.000/ -0.002
7.000 - 9.999	+0.003/ -0.000	10/32 (0.312)	Dia. B - 0.625	+0.000/ -0.004	0.344	Dia. B - 0.002	+0.000/ -0.002
10.000 - 11.999	+0.004/ -0.000	11/32 (0.344)	Dia. B - 0.687	+0.000/ -0.004	0.375	Dia. B - 0.002	+0.000/ -0.002
12.000 - 13.999	+0.004/ -0.000	12/32 (0.375)	Dia. B - 0.750	+0.000/ -0.005	0.406	Dia. B - 0.002	+0.000/ -0.002
14.000 - 17.999	+0.004/ -0.000	13/32 (0.406)	Dia. B - 0.812	+0.000/ -0.005	0.437	Dia. B - 0.002	+0.000/ -0.002
18.000 +	+0.005/ -0.000	14/32 (0.437)	Dia. B - 0.875	+0.000/ -0.006	0.469	Dia. B - 0.002	+0.000/ -0.002



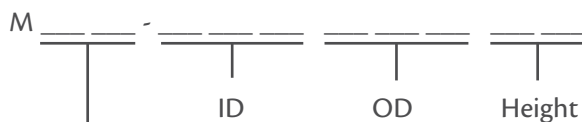
Materials	Temp. Range	
Nitrile (NBR)	-40°C	to 120°C
Viton™/Fluorocarbon (FKM)	-26°C	to 204°C
Hydrogenated Nitrile (HNBR)	-40°C	to 160°C
Chloroprene (CR)	-40°C	to 121°C

Product Description

Homogenous U-cups (HU) also known as block Vees, are non-loaded, U-cups. HU Seals are popular in low pressure applications where a low friction seal would be beneficial. They are most commonly used in pneumatic applications as a rod or piston seal. The design is suited for situations where space is limited. HU seals are typically made from an 80 durometer nitrile, but is also available fluorocarbon, chloroprene, and other homogenous materials.

As pressure is applied to the HU, the seal experiences an increase in sealing force until it reaches the maximum pressure the seal can handle. These seals can withstand pressures of up to 250 PSI in pneumatic applications, and up to 1,250 PSI in hydraulic applications.

Part Numbers:

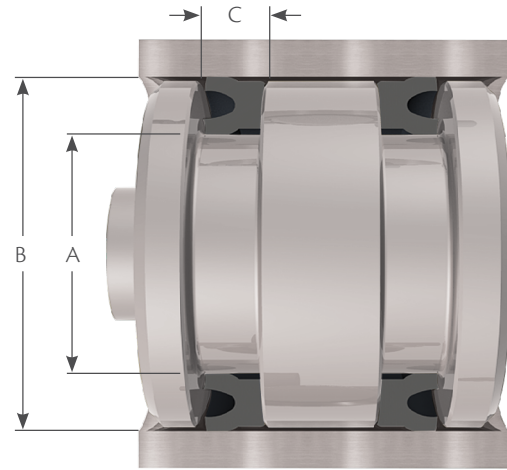
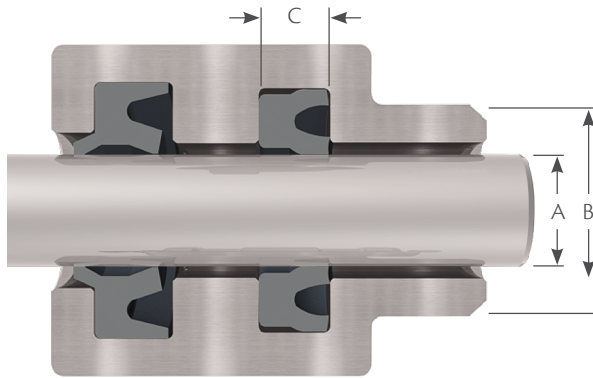


HU - NBR

UV - Viton™ FKM

Example: MHU 22305 - Homogenous U-Cup, Nitrile, 22.00 mm ID 30.00 mm OD 5.00 mm Height

Homogenous U-Cups

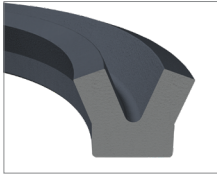


Homogenous U-Cups

Additional sizes and materials are available upon request.

Part Number	A Shaft/Piston Groove Dia.	B Bore/Shaft Groove Dia.	C Groove Width
MHU 4104	4.00	10.00	4.00
MHU 4124	4.00	12.00	4.00
MHU 5125	5.00	12.00	5.00
MHU 6124	6.00	12.00	4.00
MHU 6126	6.00	12.00	6.00
MHU 6155	6.00	15.00	5.00
MHU 7134	7.00	13.00	4.00
MHU 8166	8.00	16.00	6.00
MHU 1013623	10.00	13.60	2.30
MHU 10164	10.00	16.00	4.00
MHU 10188	10.00	18.00	8.00
MHU 10205	10.00	20.00	5.00
MHU 10208	10.00	20.00	8.00
MHU 12184	12.00	18.00	4.00
MHU 12185	12.00	18.00	5.00
MHU 14205	14.00	20.00	5.00
MHU 14226	14.00	22.00	6.00
MHU 15224	15.00	22.00	4.00
MHU 153010	15.00	30.00	10.00
MHU 16245	16.00	24.00	5.00
MHU 162455	16.00	24.00	5.50
MHU 162465	16.00	24.00	6.50
MHU 16268	16.00	26.00	8.00
MHU 18244	18.00	24.00	4.00
MHU 18306	18.00	30.00	6.00

Part Number	A Shaft/Piston Groove Dia.	B Bore/Shaft Groove Dia.	C Groove Width
MHU 20284	20.00	28.00	4.00
MHU 20308	20.00	30.00	8.00
MHU 203510	20.00	35.00	10.00
MHU 22305	22.00	30.00	5.00
MHU 22306	22.00	30.00	6.00
MHU 233255	23.00	32.00	5.50
MHU 243255	24.00	32.00	5.50
MHU 253351	25.00	33.00	5.10
MHU 25338	25.00	33.00	8.00
MHU 25358	25.00	35.00	8.00
MHU 25388	25.00	38.00	8.00
MHU 25406	25.00	40.00	6.00
MHU 254010	25.00	40.00	10.00
MHU 284310	28.00	43.00	10.00
MHU 30386	30.00	38.00	6.00
MHU 30407	30.00	40.00	7.00
MHU 305512	30.00	55.00	12.00
MHU 355010	35.00	50.00	10.00
MHU 36486	36.00	48.00	6.00
MHU 40505	40.00	50.00	5.00
MHU 40507	40.00	50.00	7.00
MHU 40509	40.00	50.00	9.00
MHU 40528	40.00	52.00	8.00
MHU 405510	40.00	55.00	10.00
MHU 406012	40.00	60.00	12.00



Homogenous U-Cups

Part Number	A Shaft/Piston Groove Dia.	B Bore/Rod Groove Dia.	C Groove Width
MHU 42506	42.00	50.00	6.00
MHU 456010	45.00	60.00	10.00
MHU 507010	50.00	70.00	10.00
MHU 507012	50.00	70.00	12.00
MHU 53636	53.00	63.00	6.00
MHU 557075	55.00	70.00	7.50
MHU 60738	60.00	73.00	8.00
MHU 607575	60.00	75.00	7.50
MHU 65756	65.00	75.00	6.00
MHU 70806	70.00	80.00	6.00
MHU 759510	75.00	95.00	10.00
MHU 759512	75.00	95.00	12.00
MHU 7510515	75.00	105.00	15.00
MHU 80905	80.00	90.00	5.00
MHU 8010012	80.00	100.00	12.00
MHU 8010015	80.00	100.00	15.00
MHU 8010515	80.00	105.00	15.00
MHU 821009	82.00	100.00	9.00

Part Number	A Shaft/Piston Groove Dia.	B Bore/Rod Groove Dia.	C Groove Width
MHU 851009	85.00	100.00	9.00
MHU 8511012	85.00	110.00	12.00
MHU 9011512	90.00	115.00	12.00
MHU 951109	95.00	110.00	9.00
MHU 971058	97.00	105.00	8.00
MHU 10012012	100.00	120.00	12.00
MHU 11013518	110.00	135.00	18.00
MHU 12015018	120.00	150.00	18.00
MHU 155170115	155.00	170.00	11.50
MHU 17520515	175.00	205.00	15.00
MHU 18021022	180.00	210.00	22.00
MHU 18520011	185.00	200.00	11.00
MHU 20022015	200.00	220.00	15.00
MHU 20023022	200.00	230.00	22.00
MHU 24028020	240.00	280.00	20.00
MHU 30033022	300.00	330.00	22.00
MHU 58062020	580.00	620.00	20.00

Fluorocarbon

Part Number	A Shaft/Piston Groove Dia.	B Bore/Rod Groove Dia.	C Groove Width
MUV 141845	14.00	18.00	4.50
MUV 15258	15.00	25.00	8.00
MUV 253357	25.00	33.00	5.70
MUV 404857	40.00	48.00	5.70
MUV 40486	40.00	48.00	6.00
MUV 40507	40.00	50.00	7.00
MUV 425034	42.00	50.00	3.40
MUV 455510	45.00	55.00	10.00
MUV 506010	50.00	60.00	10.00
MUV 56666	56.00	66.00	6.00

Part Number	A Shaft/Piston Groove Dia.	B Bore/Rod Groove Dia.	C Groove Width
MUV 607610	60.00	76.00	10.00
MUV 709012	70.00	90.00	12.00
MUV 85979	85.00	97.00	9.00
MUV 9011012	90.00	110.00	12.00
MUV 11012510	110.00	125.00	10.00
MUV 11012512	110.00	125.00	12.00
MUV 13516015	135.00	160.00	15.00
MUV 16018015	160.00	180.00	15.00
MUV 250280173	250.00	280.00	17.30