

Hi-Flow
Dry-Release
Couplings

NOVAFLEX® 

Offered by:



Technical Information

Advanced Fluid Handling Systems by Novaflex

Novaflex Hi-Flow Dry-Release™ Couplings 'HDC' **The Next Generation in Dry-Release Technology**

State of the art couplings designed to safely transfer the most aggressive and valuable product with minimum operator intervention



Applications

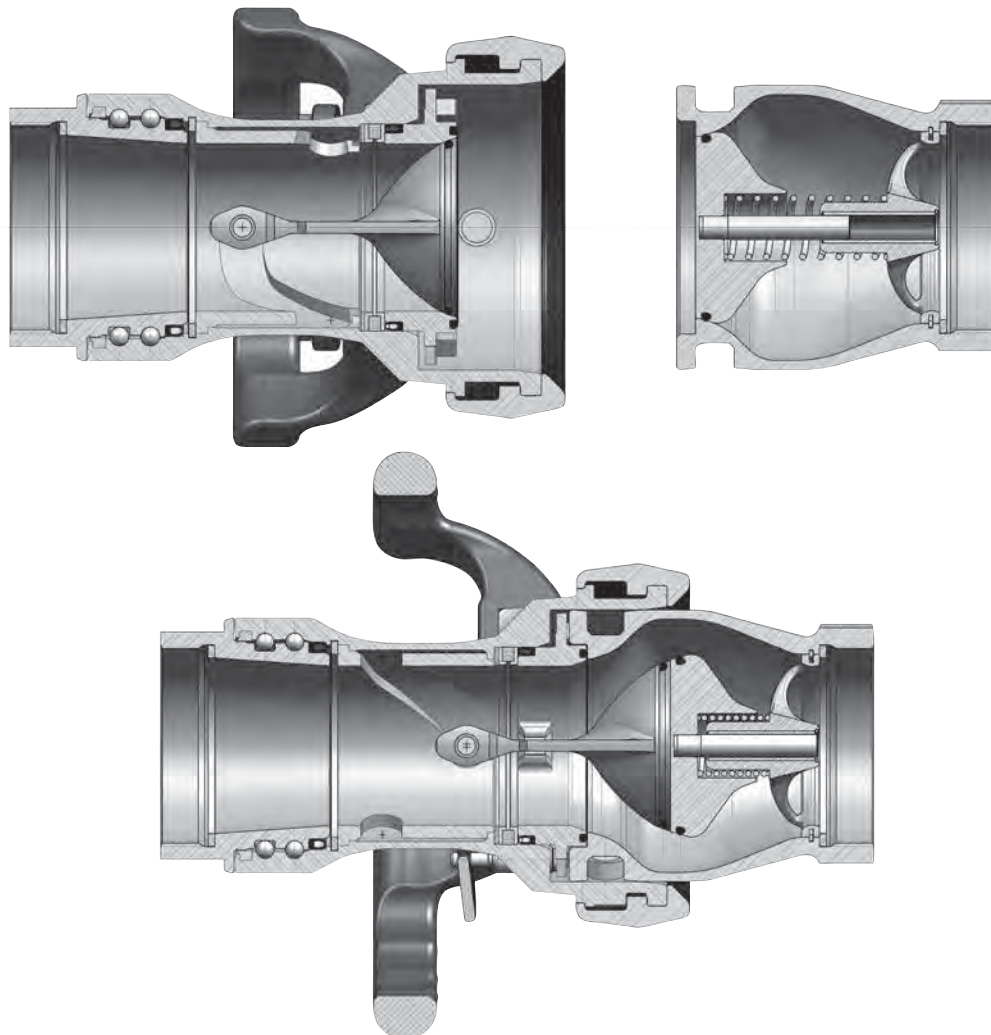
- Bulk chemical loading / discharge
- Offshore rig supply vessels
- IBC containers
- Ship bunkering
- Pharmaceutical processing
- Rail tanker loading / discharge
- LPG loading
- Ship manifold exchange
- Alternative vehicle fuel supply
- Refrigerant transfer
- Food feedstock
- Rail locomotive fueling
- Gas fueled pump systems
- Hazardous waste transfer
- Aviation bunkering
- Exchange / blend manifolds
- AdBlue / DEF logistics
- Pressurized chemical gas transfer
- Military fueling
- Acid transfer

Function

Upon presenting the coupler to the adapter, rotate the coupler until the 3 rollers in the coupler socket line up with the corresponding slots in the adapter connection flange.

Whilst supporting the hose, push the coupler onto the adapter and rotate 15° clockwise until the two coupling halves are secured together. At this stage of the connection process, the valves are still closed and no product will flow until a further rotation of 90° has been performed. Product can now flow.

To close the valves and disconnect the two coupling halves, reverse the procedure. Couplers fitted with the optional manual locking feature can be connected without any additional action from the operator, but the locking lever must be actuated prior to counter rotation of the coupler being permitted.



Socket Size - All Novaflex HDC couplings conform to the interchangeability specifications outlined in N.A.T.O. STANAG 3756 PHE, earlier T.E.A.M. standard, and internationally agreed norms encompassing dimensions ensuring interchangeability between different manufacturers subscribing to these standards.

Maximum Connection Pressure - Refers to the maximum allowable static pressure present in either the coupler and/or the adapter during the process of connecting or disconnecting the coupling halves.

Maximum/Minimum Operating Temperature - Refers to the design temperature of the coupling whilst maintaining full safety factors and burst pressures. Primary seal specifications should always be checked to ensure satisfactory operating characteristics at temperature extremes in specific applications.

Broad Range Of Elastomers - Many different styles of 'O' Rings are available to fit exact application requirements including:

- Viton (FKM)*, EPDM*, Nitrile (NBR)
- Fluoroelastomers (Chemraz and Kalrez)*

e.g. 2" SS Coupler with Chemraz Seals Part No. 8CPLSC02

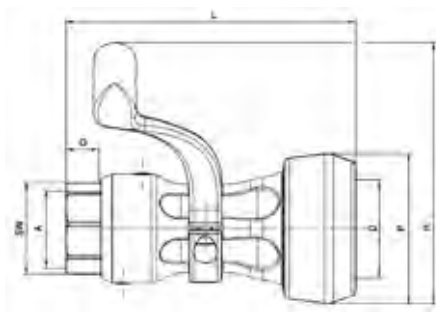
Viton is standard.

*All trademarks used are properties of their respective owners.

*Viton & Kalrez are registered trademarks of DuPont Performance Elastomers. *Chemraz is a registered trademark of Greene Tweed.

HDC-CPL 1" Stainless Steel 316L

Dry-Release Coupler PART ID: 8CPLSV01



SW Wrench Size 46 mm/Octagon

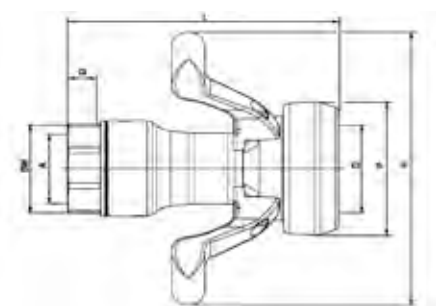
DN	NPS	D	A	G	L	H (with handle)	P (without handle)	Weight	Maximum Operating Pressure	Maximum Connection Pressure	Min/Max Operating Temperature	Material
Size	Size	Socket	Connection	Thread Length	Length	Handles (optional)	Protection Ring					
25	1"	65 mm	BSP ISO 228-G 1	11 mm	135.5 mm	141 mm	81 mm	1.78 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
25	1"	65 mm	NPT ANSI B2.1	22 mm	135.5 mm	141 mm	81 mm	1.75 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L

NovaFlex® Hi-Flow™ Dry-Release™ Couplings 'HDC'

HDC-CPL 1½" - 2" Stainless Steel 316L

Dry-Release Coupler PART ID: 8CPLSV01.5.

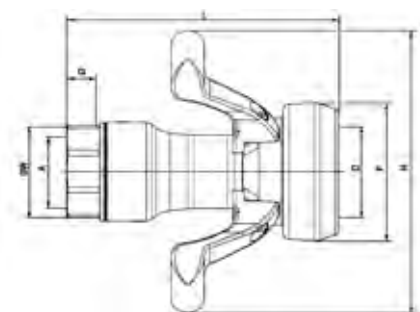
PART ID: 8CPLSV02



HDC-CPL 1½" - 2" Aluminum

Dry-Release Coupler PART ID: 8CPLAV01.5

PART ID: 8CPLAV02

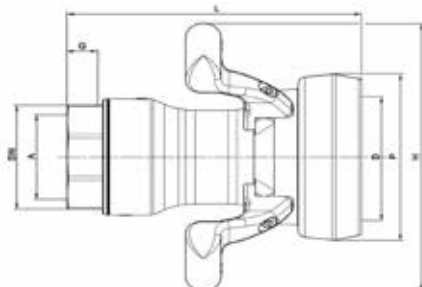


SW Wrench Size 65 mm/Octagon

DN	NPS	D	A	G	L	H	P	Weight	Maximum Operating Pressure	Maximum Connection Pressure	Min/Max Operating Temperature	Material
Size	Size	Socket	Connection	Thread Length	Length	Handles	Protection Ring					
40	1.5"	70mm	BSP ISO 228-G2	20mm	168mm	200mm	98mm	2.7Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
40	1.5"	70mm	NPT ANSI B2.1	22mm	168mm	200mm	98mm	2.7Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
40	1.5"	70mm	BSP ISO 228-G2	20mm	168mm	200mm	98mm	1.3Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum
40	1.5"	70mm	NPT ANSI B2.1	22mm	168mm	200mm	98mm	1.3Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum
50	2"	70 mm	BSP ISO 228-G 2	20 mm	164 mm	200 mm	98 mm	2.4 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
50	2"	70 mm	NPT ANSI B2.1	21.5 mm	168 mm	200 mm	98 mm	2.4 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
50	2"	70 mm	BSP ISO 228-G 2	20 mm	164 mm	200 mm	98 mm	1.2 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum
50	2"	70 mm	NPT ANSI B2.1	21.5 mm	168 mm	200 mm	98 mm	1.2 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum

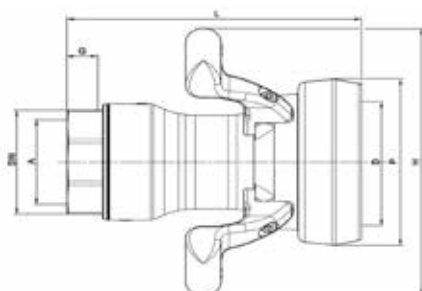
HDC-CPL 3" Stainless Steel 316L

Dry-Release Coupler PART ID: 8CPLSV03



HDC-CPL 3" Aluminum

Dry-Release Coupler PART ID: 8CPLAV03



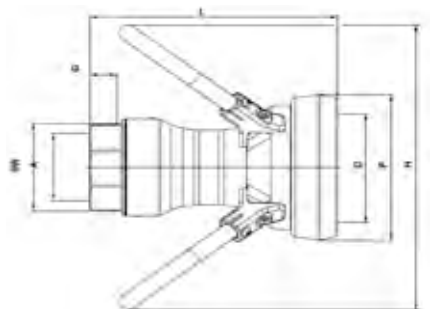
SW Wrench Size 100 mm/Octagon

DN	NPS	D	A	G	L	H	P	Weight	Maximum Operating Pressure	Maximum Connection Pressure	Min/Max Operating Temperature	Material
Size	Size	Socket	Connection	Thread Length	Length	Handles	Protection Ring					
80	3"	119 mm	BSP ISO 228-G 3	24 mm	232.5 mm	258 mm	160 mm	8.7 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
80	3"	119 mm	NPT ANSI B2.1	34 mm	242 mm	258 mm	160 mm	9.0 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
80	3"	119 mm	BSP ISO 228-G 3	24 mm	232.5 mm	258 mm	160 mm	4.1 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum
80	3"	119 mm	NPT ANSI B2.1	34 mm	242 mm	258 mm	160 mm	4.2 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum

NovaFlex® Hi-Flow™ Dry-Release™ Couplings 'HDC'

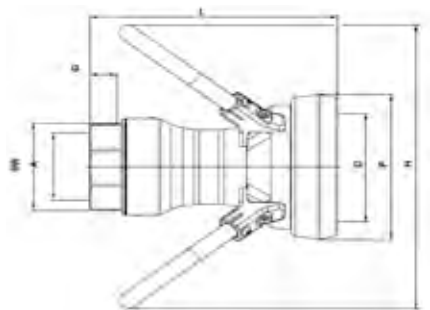
HDC-CPL 4" Stainless Steel 316L

Dry-Release Coupler PART ID: 8CPLSV04



HDC-CPL 4" Aluminum

Dry-Release Coupler PART ID: 8CPLAV04

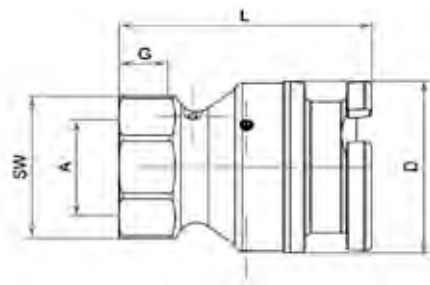


SW Wrench Size 125 mm/Octagon

DN	NPS	D	A	G	L	H	P	Weight	Maximum Operating Pressure	Maximum Connection Pressure	Min/Max Operating Temperature	Material
Size	Size	Socket	Connection	Thread Length	Length	Handles	Protection Ring					
100	4"	164 mm	BSP ISO 228-G 4	24 mm	295 mm	410 mm	210 mm	18.3 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
100	4"	164 mm	NPT ANSI B2.1	35 mm	295 mm	410 mm	210 mm	18.1 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
100	4"	164 mm	BSP ISO 228-G 4	24 mm	295 mm	410 mm	210 mm	8.1 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum
100	4"	164 mm	NPT ANSI B2.1	35 mm	295 mm	410 mm	210 mm	8.0 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum

HDC-ADP 1" Stainless Steel 316L

Dry-Release Adapter PART ID: 8ADPSV01



SW Wrench size 46 mm Octagon

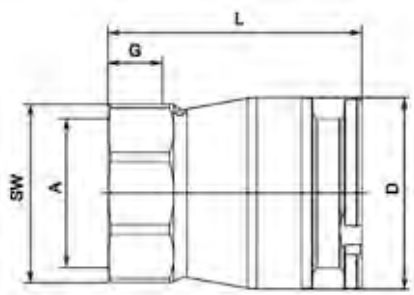
DN	NPS	D	A	G	L	Weight	Maximum Operating Pressure	Maximum Connection Pressure	Min/Max Operating Temperature	Material
Size	Size	Socket	Connection	Thread Length	Length					
25	1"	65 mm	BSP ISO 228-G 1	11 mm	68.5 mm	0.52 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
25	1"	65 mm	NPT ANSI B2.1	22 mm	77.5 mm	0.59 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L

NovaFlex® Hi-Flow™ Dry-Release™ Couplings 'HDC'

HDC-ADP 1½" - 2" Stainless Steel 316L

Dry-Release Adapter PART ID: 8ADPSV01.5

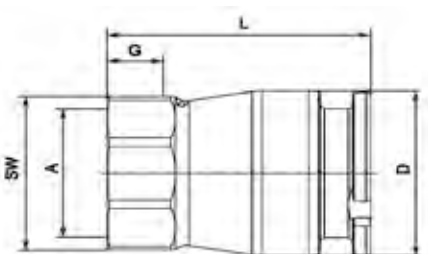
PART ID: 8ADPSV02



HDC-ADP 1½" - 2" Aluminum

Dry-Release Adapter PART ID: 8ADPAV01.5

PART ID: 8ADPAV02

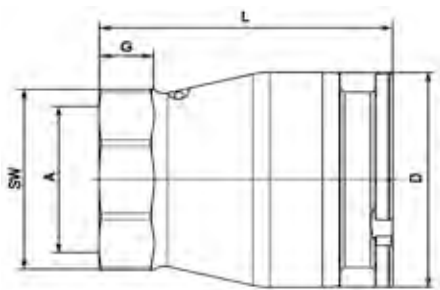


SW Wrench size 65 Octagon

DN	NPS	D	A	G	L	Weight	Maximum Operating Pressure	Maximum Connection Pressure	Min/Max Operating Temperature	Material
Size	Size	Socket	Connection	Thread Length	Length					
40	1.5"	70mm	BSP ISO 228- G2	20mm	198mm	1.2Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
40	1.5"	70mm	NPT ANSI B2.1	22mm	198mm	1.2Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
40	1.5"	70mm	BSP ISO 228- G2	20mm	198mm	0.6Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum
40	1.5"	70mm	NPT ANSI B2.1	22mm	198mm	0.6Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum
50	2"	70 mm	BSP ISO 228-G 2	20 mm	92.5 mm	0.86 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
50	2"	70 mm	NPT ANSI B2.1	21.5 mm	94 mm	0.87 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
50	2"	70 mm	BSP ISO 228-G 2	20 mm	92.5 mm	0.45 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum
50	2"	70 mm	NPT ANSI B2.1	21.5 mm	94 mm	0.46 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum

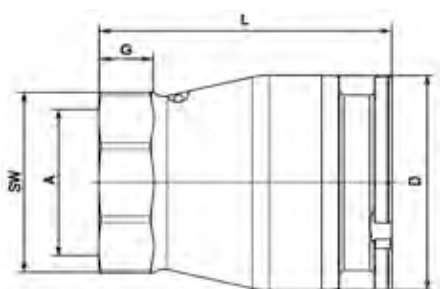
HDC-ADP 3" Stainless Steel 316L

Dry-Release Adapter PART ID: 8ADPSV03



HDC-ADP 3" Aluminum

Dry-Release Adapter PART ID: 8ADPAV03



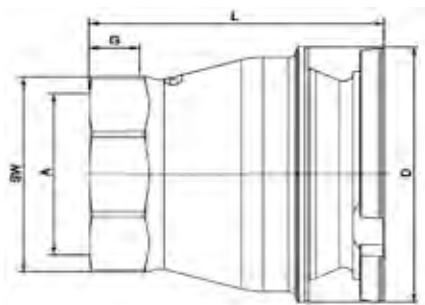
SW Wrench size 100 Octagon

DN	NPS	D	A	G	L	Weight	Maximum Operating Pressure	Maximum Connection Pressure	Min/Max Operating Temperature	Material
Size	Size	Socket	Connection	Thread Length	Length					
80	3"	119 mm	BSP ISO 228-G 3	24 mm	134 mm	3.4 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
80	3"	119 mm	NPT ANSI B2.1	34 mm	144 mm	3.7 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
80	3"	119 mm	BSP ISO 228-G 3	24 mm	134 mm	1.8 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum
80	3"	119 mm	NPT ANSI B2.1	34 mm	144 mm	1.9 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum

NovaFlex® Hi-Flow™ Dry-Release™ Couplings 'HDC'

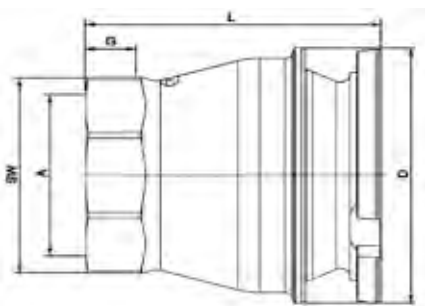
HDC-ADP 4" Stainless Steel 316L

Dry-Release Adapter PART ID: 8ADPSV04



HDC-ADP 4" Aluminum

Dry-Release Adapter PART ID: 8ADPAV04

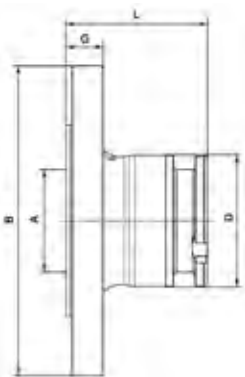


SW Wrench size 125 Octagon

DN	NPS	D	A	G	L	Weight	Maximum Operating Pressure	Maximum Connection Pressure	Min/Max Operating Temperature	Material
Size	Size	Socket	Connection	Thread Length	Length					
100	4"	164 mm	BSP ISO 228-G 4	24 mm	156 mm	6.9 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
100	4"	164 mm	NPT ANSI B2.1	35 mm	166 mm	7.2 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
100	4"	164 mm	BSP ISO 228-G 4	24 mm	156 mm	3.4 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum
100	4"	164 mm	NPT ANSI B2.1	35 mm	166 mm	3.6 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum

HDC-ADF 1" Stainless Steel 316L

Dry-Release Flanged Adapter PART ID: 8ADFSV01



HDC-ADF 1" Aluminum

Dry-Release Flanged Adapter PART ID: 8ADFAV01



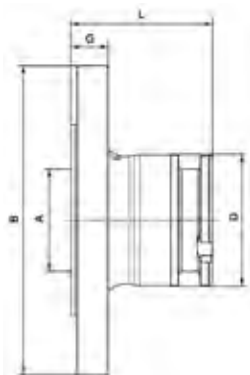
DN	NPS	D	A	G	L		Weight	Maximum Operating Pressure	Maximum Connection Pressure	Min/Max Operating Temperature	Material
Size	Size	Socket	Connection	Flange Diameter	Flange Width	Length					
25	1"	56 mm	EN 1092-1 Form B PN 25	115 mm	18 mm	71 mm	1.62 Kg	25bar/363psi	25bar/363psi	-40°C / +150°C	Stainless Steel
25	1"	56 mm	ANSI B 16.5 1" Class 300	124 mm	17.5 mm	71 mm	1.76 Kg	25bar/363psi	25bar/363psi	-40°C / +150°C	Stainless Steel
25	1"	56 mm	ANSI B 16.5 1" Class 150	108 mm	14.2 mm	68 mm	1.23 Kg	25bar/232psi	25bar/232psi	-40°C / +150°C	Stainless Steel
25	1"	56 mm	EN 1092-1 Form B PN 16	115 mm	18 mm	71 mm	0.59 Kg	16bar/232psi	16bar/232psi	-40°C / +80°C	Aluminum
25	1"	56 mm	ANSI B 16.5 1" Class 150	108 mm	14.2 mm	68 mm	0.46 Kg	16bar/232psi	16bar/232psi	-40°C / +80°C	Aluminum

NovaFlex® Hi-Flow™ Dry-Release™ Couplings 'HDC'

HDC-ADF 1½" - 2" Stainless Steel 316L

Dry-Release Flanged Adapter PART ID: 8ADFSV01.5

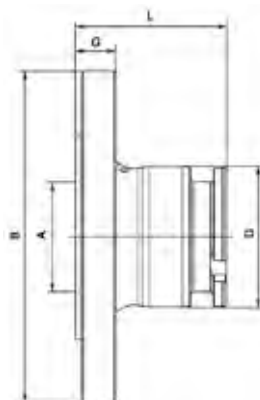
PART ID: 8ADFSV02



HDC-ADF 1½" - 2" Aluminum

Dry-Release Flanged Adapter PART ID: 8ADFAV01.5

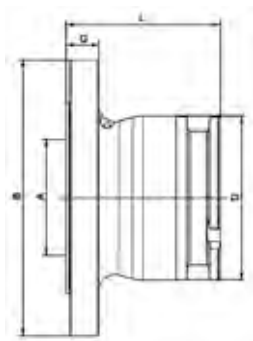
PART ID: 8ADFAV02



DN	NPS	D	A	B	G	L	Weight	Maximum Operating Pressure	Maximum Connection Pressure	Min/Max Operating Temperature	Material
Size	Size	Socket	Connection	Flange Diameter	Flange Width	Length					
40	1.5"	70mm	EN 1092-1 Form B PN25	157mm	20mm	75mm	3.0Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
40	1.5"	70mm	ANSI B 16.5 1.5" Class 300	157mm	22.4mm	75mm	3.3Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
40	1.5"	70mm	ANSI B 16.5 1.5" Class 150	127mm	19.1mm	75mm	2.4Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
40	1.5"	70mm	EN 1092-1 Form B PN16	157mm	20mm	75mm	1.0Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum
40	1.5"	70mm	ANSI B 16.5 1.5" Class 150	127mm	19.1mm	75mm	0.95Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum
50	2"	70 mm	EN 1092-1 Form B PN 25	165 mm	20 mm	75 mm	3.2 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
50	2"	70 mm	ANSI B 16.5 2" Class 300	165.1 mm	22.4 mm	75 mm	3.5 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
50	2"	70 mm	ANSI B 16.5 2" Class 150	152.4 mm	19.1 mm	75 mm	2.8 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
50	2"	70 mm	EN 1092-1 Form B PN 16	165 mm	18 mm	75 mm	1.1 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum
50	2"	70 mm	ANSI B 16.5 2" Class 150	152.4 mm	19.1 mm	75 mm	1.1 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum

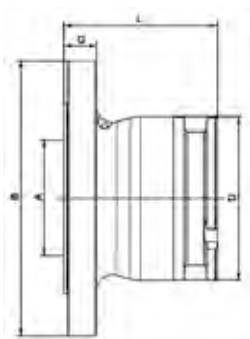
HDC-ADF 3" Stainless Steel 316L

Dry-Release Flanged Adapter PART ID: 8ADFSV03



HDC-ADF 3" Aluminum

Dry-Release Flanged Adapter PART ID: 8ADFAV03

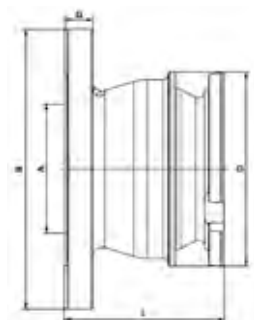


DN	NPS	D	A	B	G	L	Weight	Maximum Operating Pressure	Maximum Connection Pressure	Min/Max Operating Temperature	Material
Size	Size	Socket	Connection	Flange Diameter	Flange Width	Length					
80	3"	119 mm	EN 1092-1 Form B PN 25	200 mm	24 mm	112 mm	7.0 Kg	25bar/363psi	25bar/363psi	-40°C / +150°C	Stainless Steel 316L
80	3"	119 mm	ANSI B 16.5 2" Class 300	209.6 mm	28.4 mm	112 mm	8.3 Kg	25bar/363psi	25bar/363psi	-40°C / +150°C	Stainless Steel 316L
80	3"	119 mm	ANSI B 16.5 2" Class 150	190.5 mm	23.9 mm	112 mm	6.7 Kg	25bar/363psi	25bar/363psi	-40°C / +150°C	Stainless Steel 316L
80	3"	119 mm	EN 1092-1 Form B PN 16	200 mm	20 mm	112 mm	2.8 Kg	16bar/232psi	16bar/232psi	-40°C / +80°C	Aluminum
80	3"	119 mm	ANSI B 16.5 2" Class 150	190.5 mm	23.9 mm	112 mm	2.9 Kg	16bar/232psi	16bar/232psi	-40°C / +80°C	Aluminum

NovaFlex® Hi-Flow™ Dry-Release™ Couplings 'HDC'

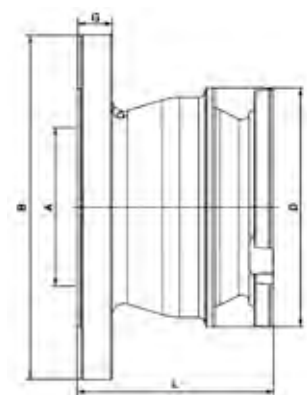
HDC-ADP 4" Stainless Steel 316L

Dry-Release Adapter PART ID: 8ADFSV04



HDC-ADF 4" Aluminum

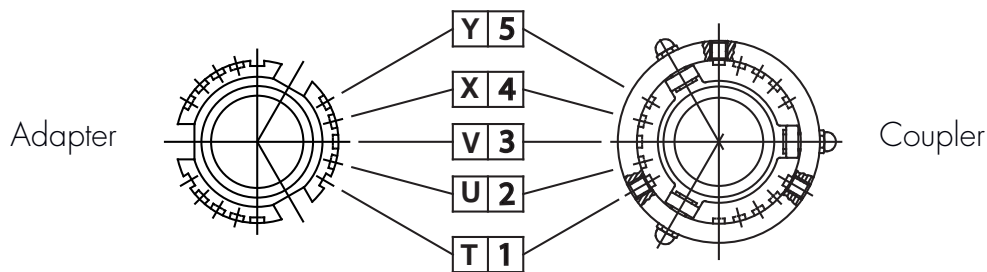
Dry-Release Flanged Adapter PART ID: 8ADFAV04



DN	NPS	D	A	B	G	L	Weight	Maximum Operating Pressure	Maximum Connection Pressure	Min/Max Operating Temperature	Material
Size	Size	Socket	Connection	Flange Diameter	Flange Width	Length					
100	4"	164 mm	EN 1092-1 Form B PN 25	235 mm	24 mm	134 mm	11.3 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
100	4"	164 mm	ANSI B 16.5 2" Class 300	254 mm	31.8 mm	134 mm	14.9 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
100	4"	164 mm	ANSI B 16.5 2" Class 150	228.6 mm	23.9 mm	134 mm	11.2 Kg	25bar/363psi	25bar/363psi	-40°C/+150°C	Stainless Steel 316L
100	4"	164 mm	EN 1092-1 Form B PN 16	235 mm	20 mm	134 mm	4.4 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum
100	4"	164 mm	ANSI B 16.5 2" Class 150	254 mm	23.9 mm	134 mm	4.9 Kg	16bar/232psi	16bar/232psi	-40°C/+80°C	Aluminum

Novaflex® HDC Couplings can be specified with a selectivity key system to dedicate a coupler to an adapter (or multiple adapters) to prevent accidental cross contamination of media when using multiple connections of the same size. Selectivity options and designations conform to agreed international standards to ensure compatibility with other brands using the same system.

Selectivity Ø 56mm 1"



Each unit can be provided with selectivity according to two systems; from T to Y with 5 alternatives or from 12 to 45 with 10 alternatives (see table). When ordering please add chosen selectivity to the part number. e.g. 8CPLSV01SEL 12

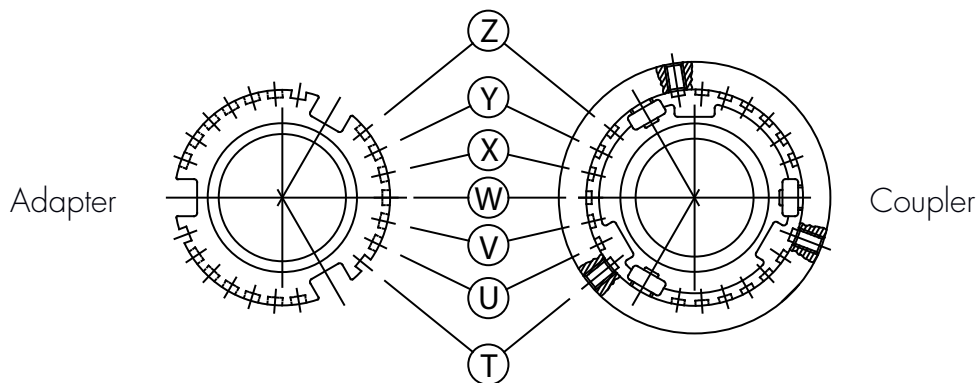
With 5 options:

T	U	V	X	Y
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With 10 options:

12	13	14	15	23
24	25	34	35	45

Selectivity Ø 70mm 1½ - 2"



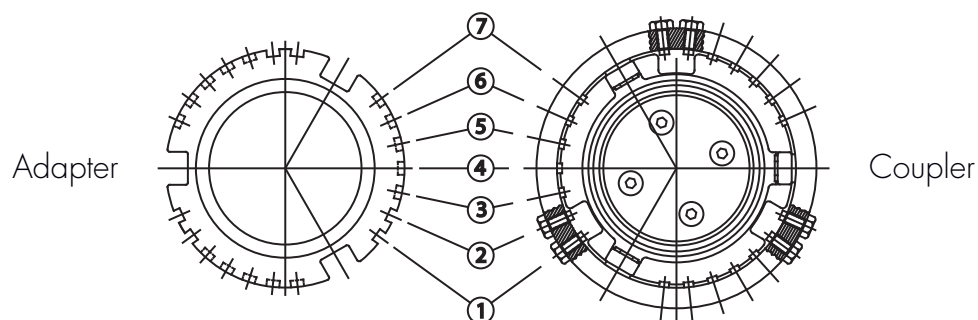
Each unit can be provided with selectivity from TU to YZ with 21 alternatives (see table). When ordering, please add chosen selectivity to the part number e.g. 8ADPSV02SELTU

With 21 options:

TU	TV	TW	TX	TY	TZ	UV
UW	UX	UY	UZ	VW	VX	VY
VZ	WX	WY	WZ	XY	XZ	YZ

NovaFlex® Hi-Flow™ Dry-Release™ Couplings 'HDC'

Selectivity Ø 119mm 3"

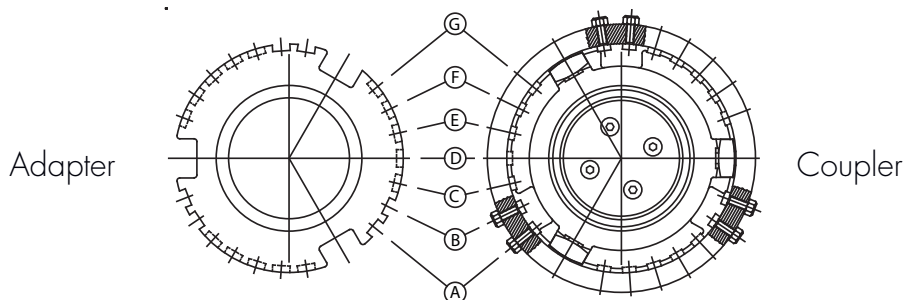


Each unit can be provided with selectivity from 12 to 67 with 21 alternatives (see table). When ordering please add chosen selectivity to the part number e.g. 8CPLSV03SEL23

With 21 options:

12	13	14	15	16	17	23
24	25	26	27	34	35	36
37	45	46	47	56	57	67

Selectivity Ø 164mm 4"



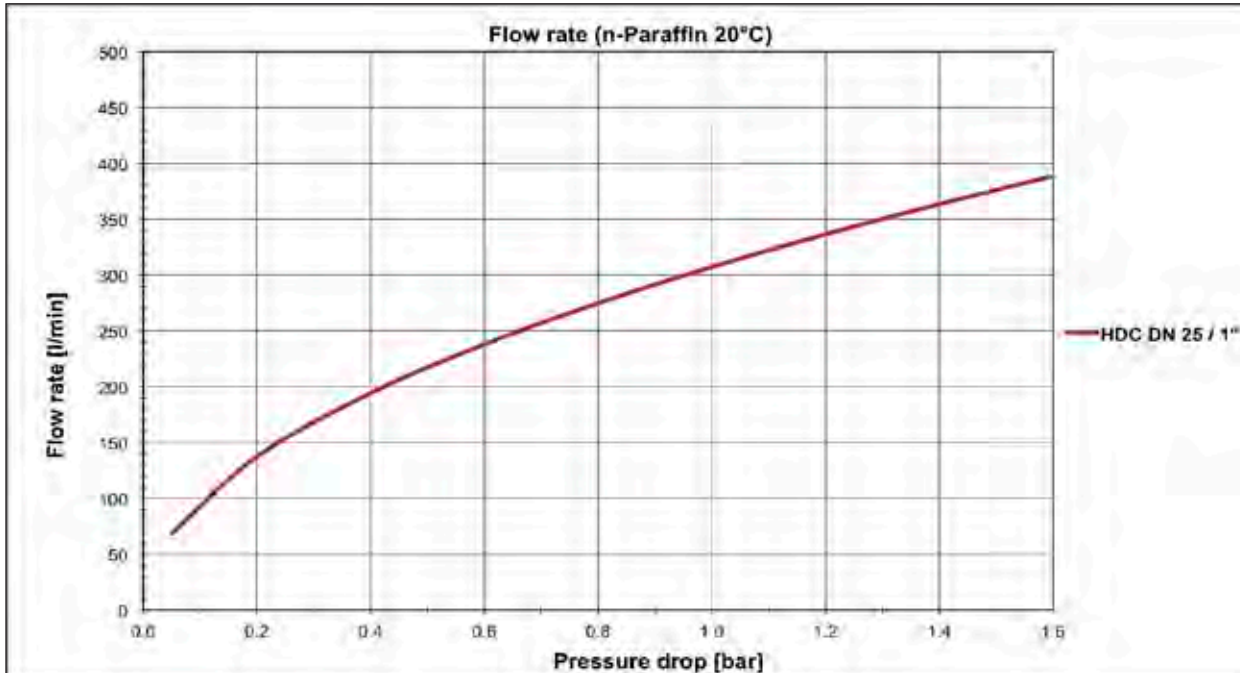
Each unit can be provided with selectivity from AB to FG with 21 alternatives (see table). When ordering please add chosen selectivity to the part number e.g. 8CPLSV0VSELAB

With 21 options:

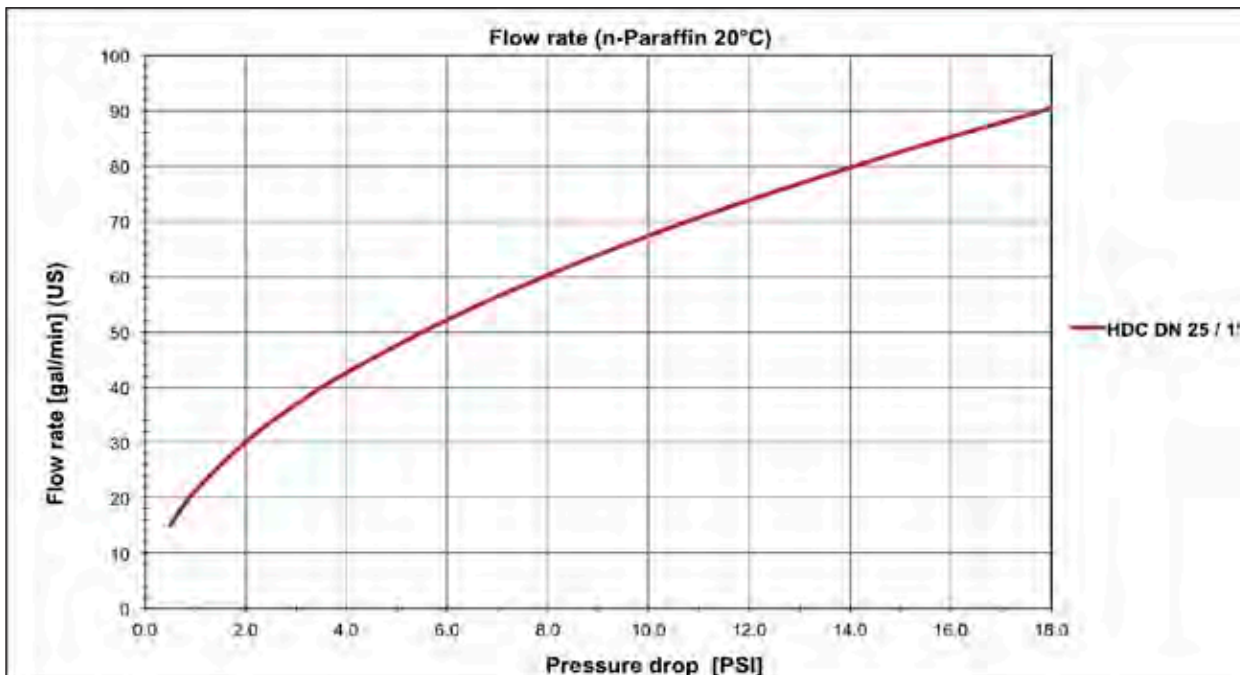
AB	AC	AD	AE	AF	AG	BC
BD	BE	BF	BG	CD	CE	CF
CG	DE	DF	DG	EF	EG	FG

Flow Rates by Coupling Diameter

Test method according to N.A.T.O STANAG 3756 annex E



HDC - DN25 / 1"

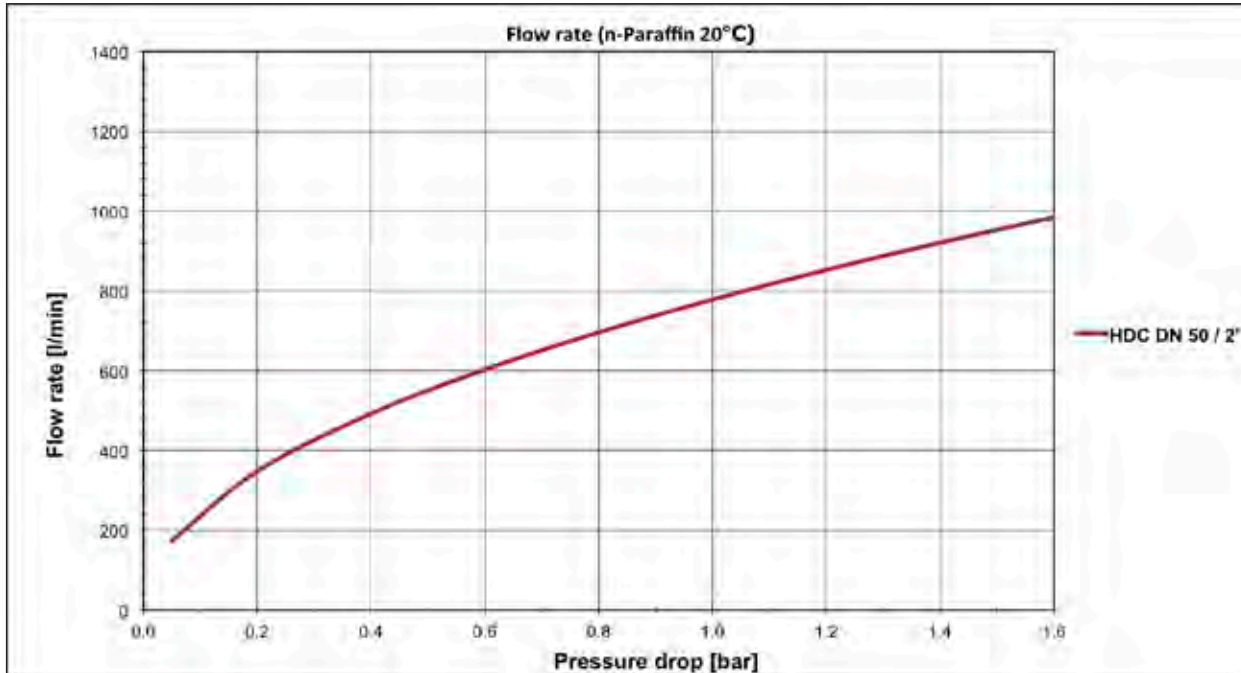


HDC - DN25 / 1"

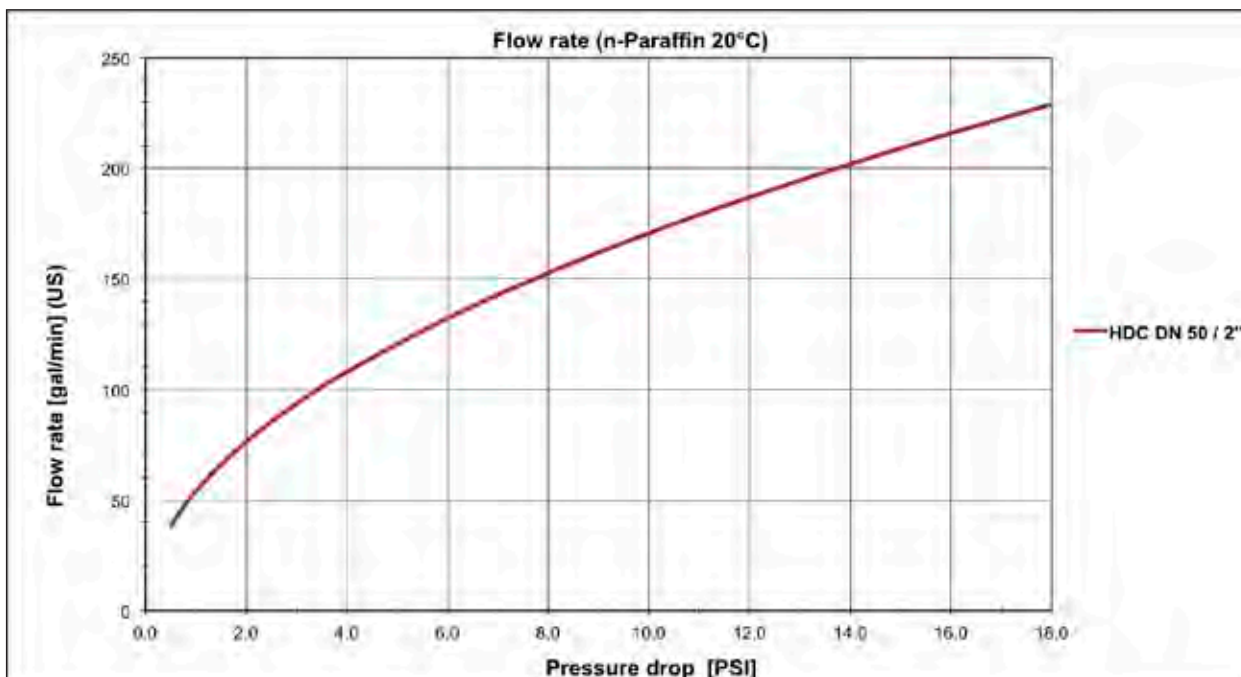
NovaFlex® Hi-Flow™ Dry-Release™ Couplings 'HDC'

Flow Rates by Coupling Diameter

Test method according to N.A.T.O STANAG 3756 annex E



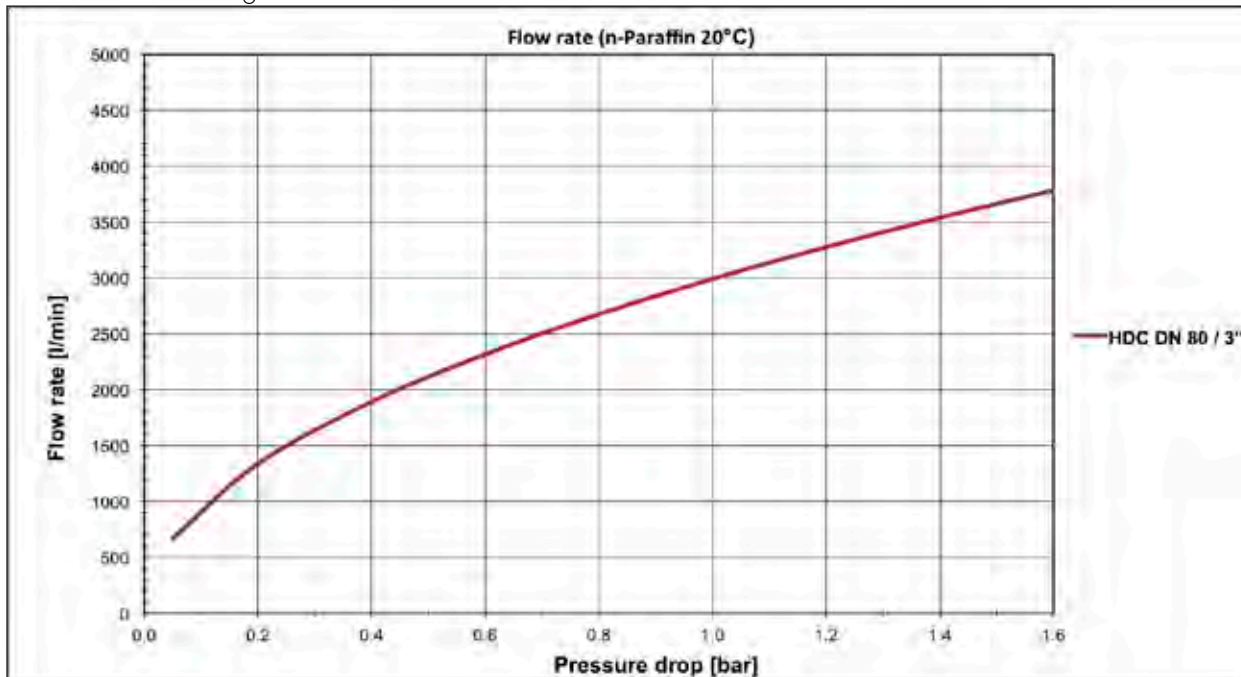
HDC - DN50 / 2"



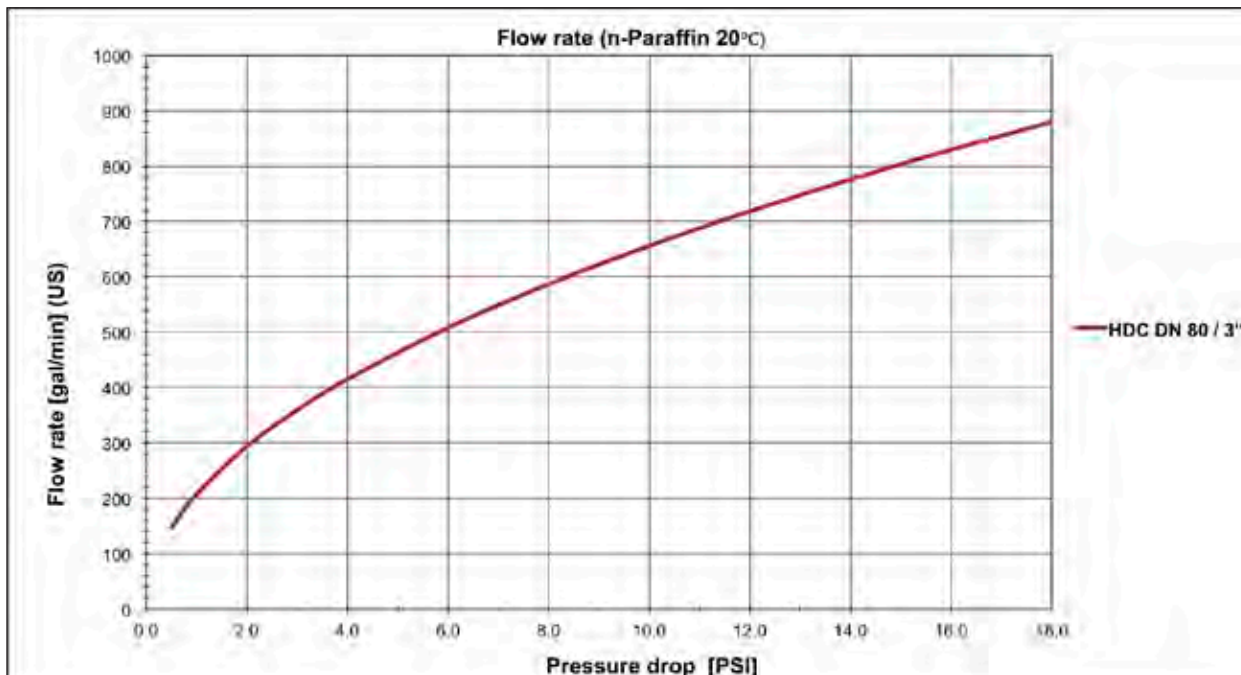
HDC - DN50 / 2"

Flow Rates by Coupling Diameter

Test method according to N.A.T.O STANAG 3756 annex E



HDC - DN80 / 3"

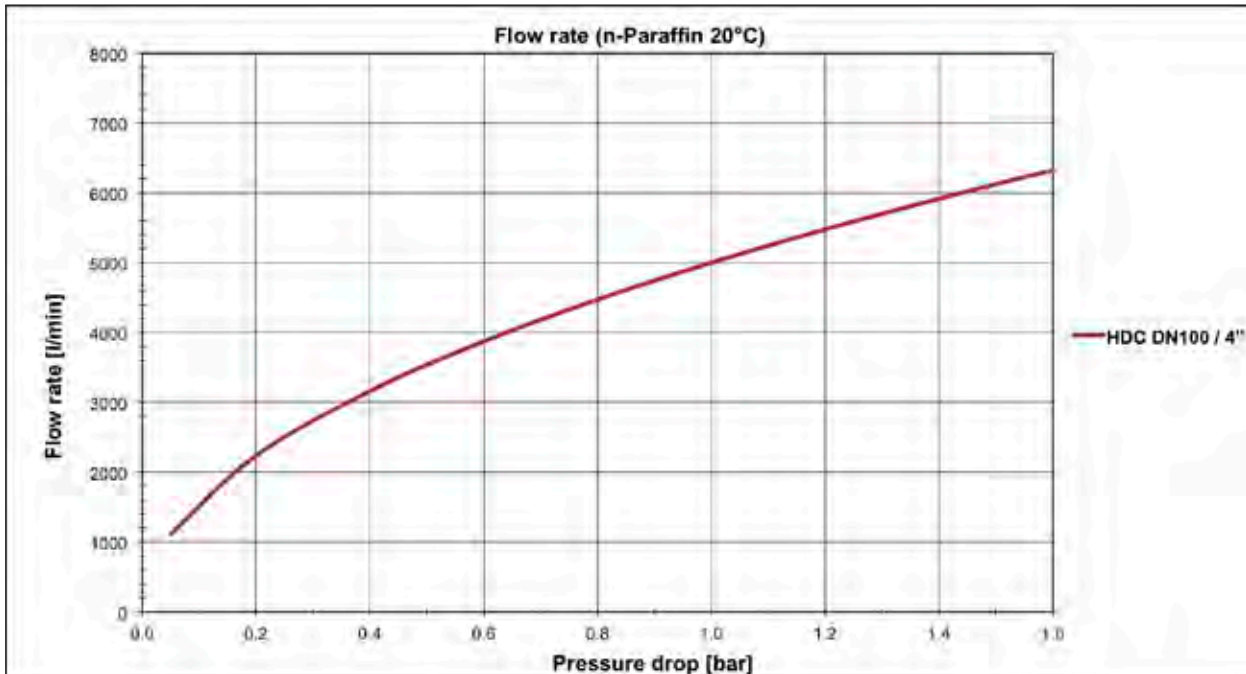


HDC - DN80 / 3"

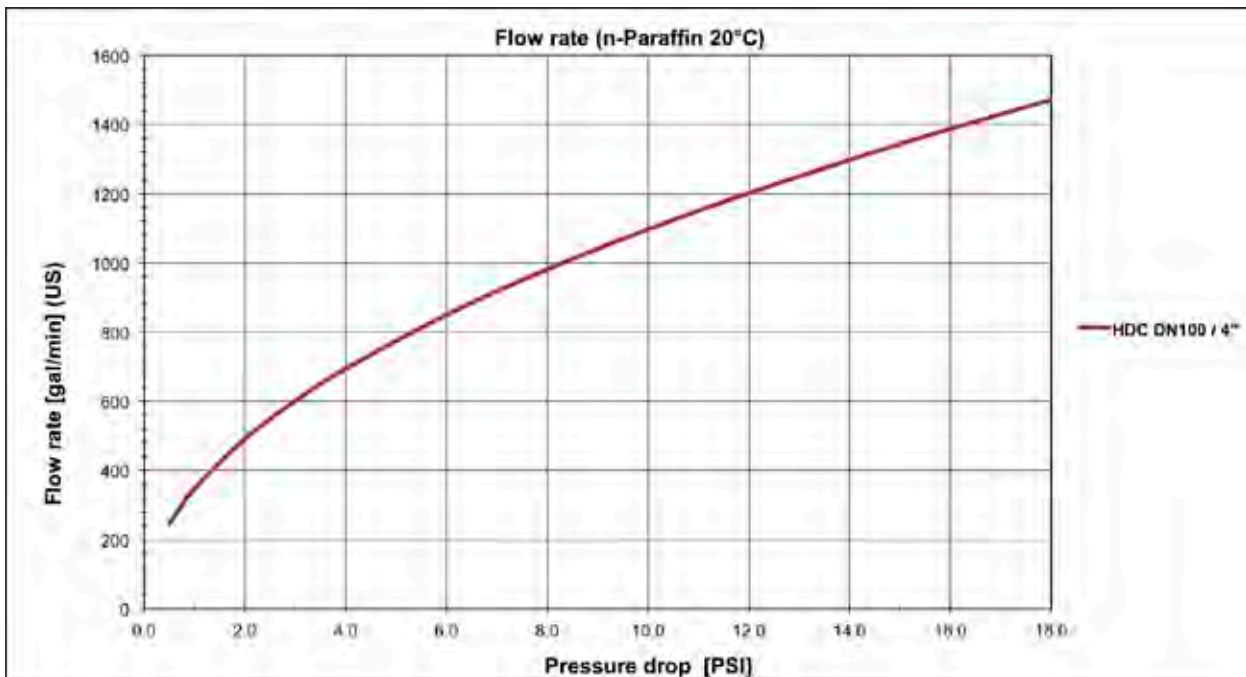
NovaFlex® Hi-Flow™ Dry-Release™ Couplings 'HDC'

Flow Rates by Coupling Diameter

Test method according to N.A.T.O STANAG 3756 annex E



HDC - DN100 / 4"



HDC - DN100 / 4"

Flow Rates by Coupling Diameter - Water

Test method according to N.A.T.O STANAG 3756 annex E

Size	Medium	PSI		0.72	2.90	5.80	8.70	11.60	14.50	17.40	20.30	23.20	26.11	29.00	31.91
		Δp	[bar]	0.05	0.20	0.40	0.60	0.80	1.00	1.20	1.40	1.60	1.80	2.00	2.20
DN 25 / 1"	Water	ΔV/Δt	[m³/h]	3.68	7.37	10.42	12.76	14.74	16.48	18.05	19.49	20.84	22.10	23.30	24.44
		ΔV/Δt	[l/min]	61.40	122.80	173.67	212.70	245.60	274.59	300.80	324.90	347.33	368.40	388.33	407.28
		ΔV/Δt	[gal/min] (US)	16.22	32.44	45.88	56.19	64.88	72.54	79.46	85.83	91.76	97.32	102.59	107.59
DN 50 / 2"	Water	ΔV/Δt	[m³/h]	10.41	20.81	29.43	36.05	41.62	46.53	50.98	55.06	58.86	62.43	65.81	69.02
		ΔV/Δt	[l/min]	173.42	346.85	490.52	600.76	693.70	775.58	849.60	917.67	981.03	1040.54	1096.83	1150.37
		ΔV/Δt	[gal/min] (US)	45.81	91.63	129.58	158.70	183.26	204.89	224.44	242.42	259.16	274.88	289.75	303.89
DN 80 / 3"	Water	ΔV/Δt	[m³/h]	40.04	80.08	113.25	138.70	160.16	179.06	196.15	211.87	226.50	240.24	253.23	265.59
		ΔV/Δt	[l/min]	667.33	1334.65	1887.48	2311.68	2669.30	2984.37	3269.22	3531.16	3774.96	4003.96	4220.54	4426.54
		ΔV/Δt	[gal/min] (US)	176.29	352.58	498.62	610.68	705.16	788.39	863.64	932.83	997.24	1057.73	1114.95	1169.37
DN 100 / 4"	Water	ΔV/Δt	[m³/h]	50.39	100.77	142.51	174.54	201.54	225.33	246.84	266.62	285.03	302.32	318.67	334.22
		ΔV/Δt	[l/min]	839.77	1679.54	2375.22	2909.04	3359.07	3755.56	4114.01	4443.64	4750.45	5038.61	5311.16	5570.40
		ΔV/Δt	[gal/min] (US)	221.84	443.69	627.47	768.49	887.37	992.11	1086.81	1173.89	1254.94	1331.06	1403.06	1471.54

Data as tested by third party agency

Dust Caps & Plugs



Maintenance Tool



For simple, fast
maintenance of key
internal components

Performance Advancement

- **High Flow Co-Efficient**
- **Lower Pressure Drop**

NovaFlex 'HDC' by RS offers the lowest pressure drop and highest flow rates in the industry. Developed from the ground up using the best expertise in the industry, this state of the art range brings numerous advancements resulting in '**Best in Class**' flow performance, ease of use and maintenance. In addition to minimal maintenance downtime, seal replacement costs have been reduced by up to 50%. These important advancements translate into improved transfer times, energy savings, lower cost per hour operations, including with viscous fluids, safely and reliably.

Quality Assurance

No matter which part or component, each fitting is backed by the highest quality standards. Each product is CE marked and conforms to the requirements of the European Pressure Equipment Directive; backed by ISO quality program and registered with the Technical Standards & Safety Authority TSSA (CRN registered in Canada). From the start of manufacturing to the final shipment to our customers, each product is put through rigorous inspection and testing steps along the way.

NovaFlex® Hi-Flow™ Dry-Release™ Couplings 'HDC'

Prior to Installation of HDC Couplings

Check that the couplings have been supplied specifically for the installation application, and that all operating conditions have been adequately evaluated according to the performance parameters and material specification of the couplings. These checks should include (but not be limited to).

Pressures: maximum anticipated operating pressure, pressures present at the point of connection, surge pressures, hydraulic pressures due to closed systems being exposed to high temperatures / direct sunlight, pressure classification of associated equipment / piping, site standards, relevant national and international standards covering the application as appropriate.

Temperatures: Anticipated maximum and minimum ambient temperatures, Maximum and minimum temperature of the transfer media, potential excessive high temperatures due to external influence, potential excessive minimum temperatures due to unintentional de-pressurization of certain media.

Chemical Resistance: All materials of HDC couplings should be checked for compatibility with all anticipated transfer media. This should include media used for flushing / purging / cleaning operations. Special attention should be paid to resistance at elevated temperature and concentration of transfer media where this could accelerate material degradation.

On installation of HDC couplings

The following checks should be made to assist correct operation:

- Ensure all associated piping and vessels are free from contaminants & debris.
- Check that sufficient room is available to operate the coupler.
- Check to ensure all gaskets and materials used to make permanent connections are suitable for the application.
- Use spanner / wrench points provided in the coupling design. Do not use pipe wrenches on any part of the coupling.
- Where possible, a pressure test is advised prior to commissioning to check security of permanent jointing.
- Where electrical continuity is required, check this is established according to site / national / international standards as appropriate.
- Consider suitable storage provision of the coupler when disconnected / not in use.

On Commissioning of HDC couplings

- Ensure the operating envelope of associated hoses does not exceed the minimum bend radius of the hose, nor place excessive strain on the coupling or hose assembly.
- Ensure loading arms are balanced in the full / empty condition that coincides with the coupling connection operation.
- Connect and disconnect the coupling several times to ensure smooth operation. Remember, increased effort will be required to operate the coupling in higher pressure applications.

Aftercare - Servicing of HDC couplings

- Couplings should be visually checked by the operator prior to every connection / disconnection for obvious signs of damage or malfunction.
- Couplings should not be stored in areas where they are likely to be subject to impact damage.
- Couplings should be stored in such a way that ingress of water or dirt / grit is minimized. Use of dedicated HDC caps and plugs is recommended where appropriate.
- Annual service frequency is recommended as a minimum. In aggressive or otherwise arduous applications, more frequent servicing may be required. Dedicated seal replacement and full service kits are available. Only original HDC seal replacement, service kits, and service tools should be used.

Please consult Novaflex's team of engineers to advise on any aspect of correct specification, installation, commissioning and maintenance of HDC Couplings.

All products by Novaflex® are warranted to be free from all defects in material and workmanship. It is impossible to test Novaflex® products under all conditions to which they might be subjected in the field. It is therefore the buyer and/or end user's responsibility to test all Novaflex® products under conditions that duplicate the service conditions prior to installation.

Prior to any application of the information within, please read carefully the following information: This catalogue is a guide for use in selecting the product for the correct application. It contains warnings, reference directions and directions for safe use. All guidelines should be clearly understood before specifying or using any Novaflex® product. Failure to follow recommended application information and recommended procedures may result in premature failure, resulting in bodily injury or property damage. Contact Novaflex® or your local Novaflex® distributor for assistance. For all Novaflex® products, always consult the most recent Proper Care and Maintenance Guides and Chemical Resistance Charts, available on our web site at www.novaflex.com. Due to continuous improvements, technical data is subject to change without notice.



The NovaFlex Group is a market leader through excellence in product innovation and design. The NovaFlex Group is a privately held company committed to continuous advancement in hose and connector solutions.

NovaFlex® has one of the broadest product ranges available in the hose and ducting marketplace, as well as the HVAC, Industrial Venting, Dry-Release™ Coupling and Commercial Exhaust Venting Systems.

Products are sold in industries across North America and around the world.



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