

Series HI • Carbon Steel
Product Description

Screw-to-connect couplings of the HI Series from STAUFF consist of a female body with a screw sleeve and a male tip with external thread. The Series is developed for high working pressure applications according to ISO 14540 and can be connected under residual pressure.

Coupling (screwing) and uncoupling (unscrewing) of the two halves is safe and very easy. After the connection is complete, all internal components have minimal play or clearance, which significantly reduces the risk of material fatigue.

Another advantage is that the risk of permanent indentation, so-called "brinelling", on the surface of the male tip is eliminated, which can occur with push-to-connect couplings in similar extreme applications.

The proven design is suitable for use in high pressure applications, such as cylinders and hydraulic tools and available in nominal sizes 6,3, 10 (1/4" - 3/8").

Features

- Poppet Valve (HI) or Ball Valve (HIB)
- Coupling made from carbon steel with Zinc/Nickel surface coating
- Connect under residual pressure
- ISO Interchange acc. to ISO 14540

Applications


High Pressure Applications

Top Features


Zinc/Nickel coating



Vibration resistant



Connect Under residual pressure



Designed for secure connection



HI

Series HI (HIB) • Carbon Steel

Material	Carbon Steel
Surface Finishing	Zinc-Nickel
Standard Seal Material(s)	NBR (Buna-N®), PU ²
Working Temperature	-25° C ... +100° C / -13° F ... +212° F
Valve Design	Poppet Valve (HI), Ball Valve (HIB) (optional)
Connection	Screw
Disconnection	Screw
Connect Under Pressure	not allowed
Application	Industrial Hydraulic, Rescue and Tensioning Hydraulics
ISO Interchange	ISO 14540



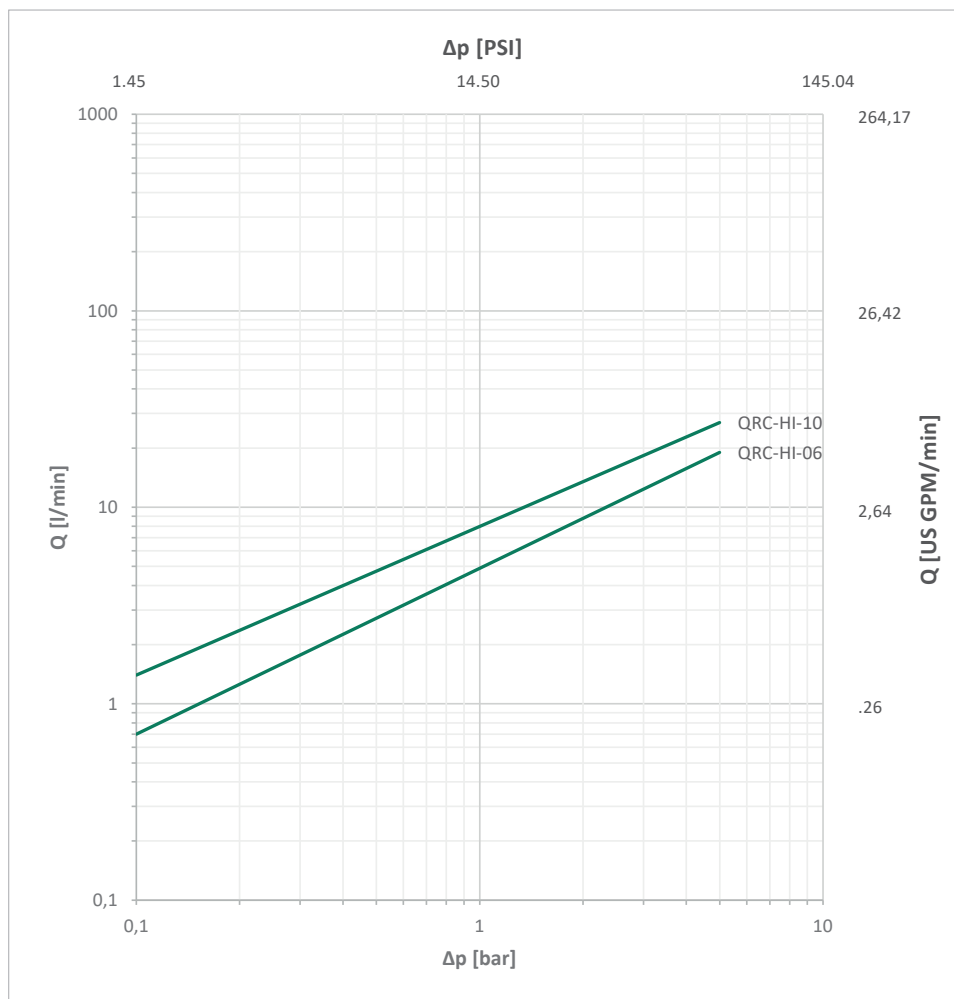
² Alternative seal materials are available on request.

Technical Data

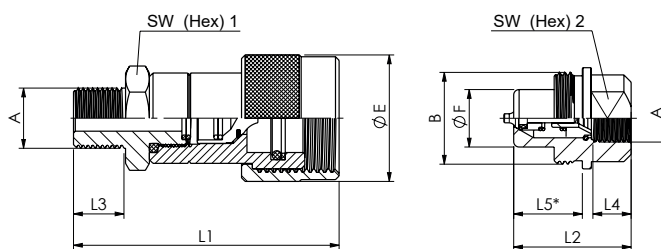
Series	BG	DN Zoll Inch	DN metric ISO 4397	Q _{max}		Working Pressure		Bursting Pressure Connected		Female Body		Male Tip		Spillage	
				l/min	US GPM	bar	PSI	bar	PSI	bar	PSI	bar	PSI	ml	fl oz
HI-06	1	1/4"	6,3	18	4.76	720	10443	2160	31328	2160	31328	2160	31328	0,5	.0176
HI-10	2	3/8"	10	34,5	9.11	720	10443	2160	31328	2160	31328	2160	31328	1	.0352
HIB-06	1	1/4"	6,3	18	4.76	720	10443	2160	31328	1440	20885	1440	20885	0,5	.0176
HIB-10	2	3/8"	10	34,5	9.11	720	10443	2160	31328	1440	20885	1440	20885	1	.0352

The indicated pressure ratings only apply to the coupling itself and depend on the connection type.

Flow Characteristics



Please note: Unless otherwise stated, all flow characteristics have been determined with hydraulic oil with a kinematic viscosity of 28,8 - 35,2 mm²/s (28,8 - 35,2 cSt) and are only valid for components with non-reducing connections.

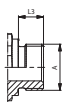


SW: Width across flats. All dimensions in mm (inch). Drawing similar Series HI-10.
* Insertion Male Tip.

Series HI-06 ▪ BG 1 ▪ Nominal Size 6,3

	Port A	Dimensions (^{mm} / _{in})									Female Body	Weight (^{kg} / _{lbs}) ca. per 100	Male Tip	Weight (^{kg} / _{lbs}) ca. per 100
		ØE	ØF	B	L1	L2	L4 min	L5	SW1	SW2				
		Ordering Codes												
Male Thread according to ANSI B 1.20.3														
	NPTF 1/4" -18	28,6 1.13	15,9 .63	1" - 18 UNS	59,7 2.35	32,5 1.28		19 .75	22 .87	19 .75	QRC-HI-06-F-NF04M-S1-W3	11,56 25.49		
Female Thread according to DIN 3852 - ISO 1179-1 - ANSI B 1.20.3														
	G 1/4"	28,6 1.13	15,9 .63	1" - 18 UNS	59,7 2.35	32,5 1.28	12 .47	19 .75	22 .87	19 .75	QRC-HI-06-F-G04-S1-W3	11,39 25.11	QRC-HI-06-M-G04-BP-W3	7,05 15.54
	NPTF 1/4" -18	28,6 1.13	15,9 .63	1" - 18 UNS	59,7 2.35	32,5 1.28		19 .75	22 .87	19 .75	QRC-HI-06-F-NF04-S1-W3	11,56 25.49	QRC-HI-06-M-NF04-BP-W3	7,12 15.70

Series HI-10 ▪ BG 2 ▪ Nominal Size 10

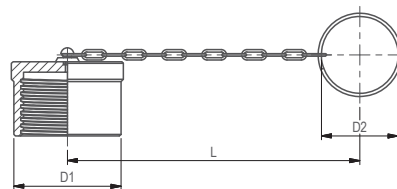
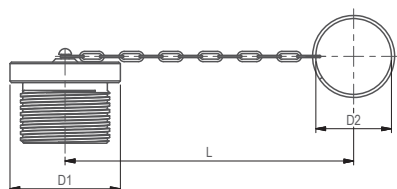
	Port A	Dimensions (mm/in)									Female Body	Weight (^{kg} /lbs) ca. per 100	Male Tip	Weight (^{kg} /lbs) ca. per 100
		ØE	ØF	B	L1	L2	L4 min	L5	SW1	SW2	Ordering Codes		Ordering Codes	
Male Thread according to ANSI B 1.20.3														
	NPTF 3/8" -18	35	19	1" 3/16-16UN	73,5			25	25	32	QRC-HI-10-F-NF06M-S1-W3	23,21		
		1.38	.75		2.89			.98	.98	1.26		51.17		
Female Thread according to ANSI B 1.20.3														
	NPTF 3/8" -18	35	19	1" 3/16-16UN		35		25	25	32			QRC-HI-10-M-NF06-BP-W3	11,38
		1.38	.75			1.38		.98	.98	1.26				25.09

In addition to the version with poppet valve is a version with ball valve available.
Please use for these version the code HIB instead of HI.

HI

Note: The connection of the two halves of a coupling is achieved depending on the type. It is important to observe the positive engagement of push-type couplings and the secure tightening of screw-type couplings to the limit stop of the thread. Forced or improper separation will result in malfunction of the coupling.

Series HI▪ Dust Protection



Dimensions (^{mm} / _{in})			Material	Dust Plug for Female Body
D1	D2	L		Ordering Codes
28,6	14	161	Carbon Steel with chain	QRC-HI-06-DM-14/CN-W3
1.13	.55	6.34		
35	14	161	Carbon Steel with chain	QRC-HI-10-DF-14/CN-W3
1.38	.55	6.34		

Dimensions (^{mm} / _{in})			Material	Dust Cap for Male Tip
D1	D2	L		Ordering Codes
28	14	161	Carbon Steel with chain	QRC-HI-06-DF-14/CN-W3
1.10	.55	6.34		
35	14	161	Carbon Steel with chain	QRC-HI-10-DM-14/CN-W3
1.38	.55	6.34		

* Available on request.