

EXPERIENCE THE GOODRIDGE  
**ADVANTAGE**

# G-LINK

Quick Disconnect Couplings



*A WINNING TEAM*  
**GOODRIDGE AND YOU**

**GOODRIDGE**  
FLUID TRANSFER SYSTEMS

*PUSH THE LIMITS*

# G-LINK

Quick Disconnect Couplings

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**ADVANTAGE**

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FLUID TRANSFER SYSTEMS

PUSH THE LIMITS

# G-LINK

## Quick Disconnect Couplings

G-Link Quick Disconnect Couplings are manufactured only from high-strength certified materials. All parts are produced to meet the highest requirements, tolerances, and appearance. Each coupling is assembled and tested to strict specifications.

The G-Link couplings of the Advantage range are in use at several successful motorsport teams.

<b><i>G-Link Bayonet Type</i></b>	<b>3</b>
<b><i>G-Link Pull Type</i></b>	<b>4</b>
<b><i>Technical Information</i></b>	<b>5</b>
<b><i>G-Link Flow Data</i></b>	<b>6-7</b>



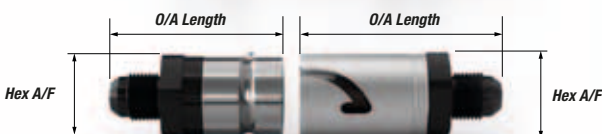
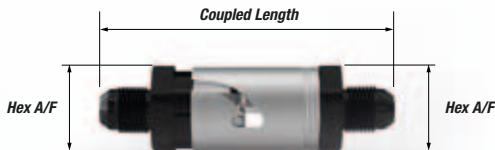
## G-Link Bayonet-Type

The Quick Disconnect Couplings of the Advantage series, G-Link Bayonet-Type are compact and lightweight couplings, developed for hydraulic and pneumatic purposes in motor sport with operating pressure up to 200 bar.

The locking mechanism with bayonet is designed for one-hand operation, pushing and twisting the outer sleeve, with no separate actuation required for operation.

Both halves, coupler and nipple, are equipped with self-acting valves to avoid loss of fluid during uncoupling, as well as air inclusion during coupling.

G-LINK BAYONET-TYPE		Dimensions			Details	
		Hex A/F	O/A Length	Coupled Length	Nominal Diam.	Max. Press
<i>Nominal Size 03</i>						
<b>GQD03BP03E</b>	QDV Bayonet-Type Plug -03 JIC EPDM seal	13mm	42.5mm	38mm	3.5mm	200bar
<b>GQD03BS03E</b>	QDV Bayonet-Type Socket -03 JIC EPDM seal	13mm	34.7mm		3.5mm	200bar
<b>GQD03BP03F</b>	QDV Bayonet-Type Plug -03 JIC FPM seal	13mm	42.5mm	38mm	3.5mm	200bar
<b>GQD03BS03F</b>	QDV Bayonet-Type Socket -03 JIC FPM seal	13mm	34.7mm		3.5mm	200bar
<b>GQD03BP04E</b>	QDV Bayonet-Type Plug -04 JIC EPDM seal	13mm	44.05mm	38mm	3.5mm	200bar
<b>GQD03BS04E</b>	QDV Bayonet-Type Socket -04 JIC EPDM seal	13mm	36.2mm		3.5mm	200bar
<b>GQD03BP04F</b>	QDV Bayonet-Type Plug -04 JIC FPM seal	13mm	44.05mm	38mm	3.5mm	200bar
<b>GQD03BS04F</b>	QDV Bayonet-Type Socket -04 JIC FPM seal	13mm	36.2mm		3.5mm	200bar
<i>Nominal Size 05</i>						
<b>GQD05BP04F</b>	QDV Bayonet-Type Plug -04 JIC FPM seal	17mm	47.5mm	43mm	5.5mm	150bar
<b>GQD05BS04F</b>	QDV Bayonet-Type Socket -04 JIC FPM seal	17mm	39.6mm		5.5mm	150bar
<b>GQD05BP04E</b>	QDV Bayonet-Type Plug -04 JIC EPDM seal	17mm	47.5mm	43mm	5.5mm	150bar
<b>GQD05BS04E</b>	QDV Bayonet-Type Socket -04 JIC EPDM seal	17mm	39.6mm		5.5mm	150bar
<b>GQD05BP06F</b>	QDV Bayonet-Type Plug -06 JIC FPM seal	17mm	47.5mm	43mm	5.5mm	150bar
<b>GQD05BS06F</b>	QDV Bayonet-Type Socket -06 JIC FPM seal	17mm	39.6mm		5.5mm	150bar
<i>Nominal Size 08</i>						
<b>GQD08BP06F</b>	QDV Bayonet-Type Plug -06 JIC FPM seal	24mm	58.6mm	58mm	8.5mm	100bar
<b>GQD08BS06F</b>	QDV Bayonet-Type Socket -06 JIC FPM seal	24mm	49.1mm		8.5mm	100bar
<b>GQD08BP08F</b>	QDV Bayonet-Type Plug -08 JIC FPM seal	24mm	61.1mm	58mm	8.5mm	100bar
<b>GQD08BS08F</b>	QDV Bayonet-Type Socket -08 JIC FPM seal	24mm	51.6mm		8.5mm	100bar



## G-Link Pull-Type

The Quick Disconnect Couplings of the Advantage series, G-Link Pull-Type, are compact and lightweight couplings, developed for hydraulic and pneumatic purposes in motor sport with operating pressure up to 150 bar.

The locking mechanism is designed for one-hand operation; no separate actuation of the retaining sleeve is required for operation. To verify the correct connection, the female half is equipped with a green indicator ring. This indicator ring can, alternatively, be replaced by a retaining clamp. This can only be attached when the halves are coupled and eliminates the risk of unintentional uncoupling.

Additionally the whole operating mechanism is O-Ring-sealed to achieve particular suitability for rough conditions and to reduce environmental effects.

Both halves, coupler and nipple, are equipped with self-acting valves to avoid loss of fluid during uncoupling, as well as air inclusion, during coupling.

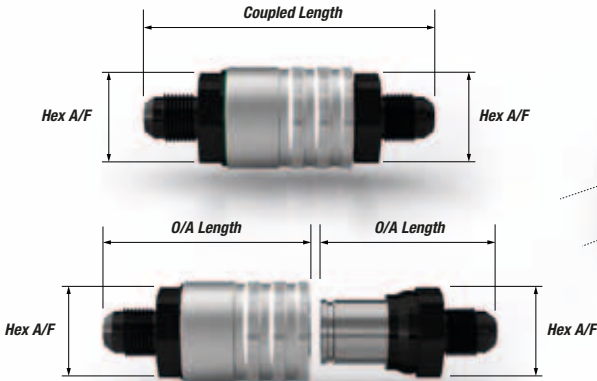
### G-LINK PULL-TYPE

		Dimensions			Details	
Nominal Size 05		Hex A/F	O/A Length	Coupled Length	Nominal Diam.	Max. Press
<b>GQD05PP04F</b>	QDV Pull-Type Plug -04 JIC FPM seal	22mm	38.1mm	43.6mm	4.5mm	200bar
<b>GQD05PP04BF</b>	QDV Pull-Type Plug -04 JIC Bulkhead FPM seal	22mm	46.1mm		4.5mm	200bar
<b>GQD05PS04F</b>	QDV Pull-Type Socket -04 JIC FPM seal	17mm	45.5mm	43.6mm	4.5mm	200bar
<b>GQD05PS04LF</b>	QDV Pull-Type Socket -04 JIC Lanyard FPM seal	17mm	45.5mm		4.5mm	200bar
<b>GQD05PP06F</b>	QDV Pull-Type Plug -06 JIC FPM seal	22mm	38.1mm	43.6mm	4.5mm	200bar
<b>GQD05PP06BF</b>	QDV Pull-Type Plug -06 JIC Bulkhead FPM seal	22mm	49.1mm		4.5mm	200bar
<b>GQD05PS06F</b>	QDV Pull-Type Socket -06 JIC FPM seal	17mm	45.5mm	43.6mm	4.5mm	200bar
<b>GQD05PS06LF</b>	QDV Pull-Type Socket -06 JIC Lanyard FPM seal	17mm	45.5mm		4.5mm	200bar
Nominal Size 08						
<b>GQD08PP06F</b>	QDV Pull-Type Plug -06 JIC FPM seal	27mm	42.6mm	52.6mm	8.0mm	150bar
<b>GQD08PP06BF</b>	QDV Pull-Type Plug -06 JIC Bulkhead FPM seal	27mm	53.6mm		8.0mm	150bar
<b>GQD08PS06F</b>	QDV Pull-Type Socket -06 JIC FPM seal	24mm	52mm	52.6mm	8.0mm	150bar
<b>GQD08PS06LF</b>	QDV Pull-Type Socket -06 JIC Lanyard FPM seal	24mm	52mm		8.0mm	150bar
<b>GQD08PP08F</b>	QDV Pull-Type Plug -08 JIC FPM seal	27mm	45.1mm	52.6mm	8.0mm	150bar
<b>GQD08PP08BF</b>	QDV Pull-Type Plug -08 JIC Bulkhead FPM seal	27mm	58.6mm		8.0mm	150bar
<b>GQD08PS08F</b>	QDV Pull-Type Socket -08 JIC FPM seal	24mm	54.5mm	52.6mm	8.0mm	150bar
<b>GQD08PS08LF</b>	QDV Pull-Type Socket -08 JIC Lanyard FPM seal	24mm	54.5mm		8.0mm	150bar
<b>GQDPC08</b>	QDV Pull-Type Cap for Plug Nominal Size 08					
Nominal Size 14						
<b>GQD14PP12F</b>	QDV Pull-Type Plug -12 JIC FPM seal	36mm	56.1mm	64.6mm	14.0mm	100bar
<b>GQD14PP12BF</b>	QDV Pull-Type Plug -12 JIC Bulkhead FPM seal	36mm	72.1mm		14.0mm	100bar
<b>GQD14PPL</b>	Adaptor-Plate for Panel Mounting (optional)					
<b>GQD14PS12F</b>	QDV Pull-Type Socket -12 JIC FPM seal	32mm	71.1mm	64.6mm	14.0mm	100bar

Optionally the dry break coupling can be used as a security shut-off device, e.g. for fuel lines. For this purpose one half of the coupling is equipped with a lanyard to separate the halves in case of an accident.

The unique locking mechanism design allows activation of separation by pulling the male half. So it is possible to install two inversely arranged couplings to avoid the risk of mistakes.

All body sizes of the G-Link Pull-Type series Quick Disconnect Couplings are also available in a non-locking version, designed for the use in refill units. Please ask for additional information on couplings and refill units.



## Technical information

As a manufacturer of hydraulic components for motorsport purposes Goodridge is heavily engaged in development and manufacturing of various fuel system elements, such as

- Quick Disconnect Couplings
- Check Valves
- Fuel Cell Ventilation Valves
- Pumps
- Filters

FKM (Viton) seals, in use in fuel systems for many years, don't have the chemical resistance for the usage with current fuel mixtures. The blending of fuel with ethanol or methanol in higher percentages made it necessary to search for a substitute material.

In cooperation with polymer compound manufacturers, Goodridge found the perfect solution for this challenge: A compound also resistant to all currently used fuel blends, as e.g.

- B100 (Biodiesel)
- B20 (Biodiesel)
- B5 (Diesel Blend; Containing 5% Biodiesel)
- Adblue (additive for scr; selective catalytic reduction)
- E85 (gasoline blend; containing 85% Ethanol)
- Vegetable Oil
- Ethanol

Additionally the applied compound has at least the same resistance to temperature and mechanical stress as the standard FKM compound and is even better qualified for low temperature than FFKM compounds e.g. Kalrez.

The consequence for motorsport applications is that the complete range can be covered with only two different sealing materials. This has a positive effect on availability and makes it easier to make the right choice.

In the future, all our fuel system components mentioned above will be equipped with the new o-rings and marked with FPM "B" for differentiation from standard FKM compound.

### Seal materials, representative fluids

The standard sealing material is a modified fluorinated rubber compound (FPM, FKM, Viton), which is identified with the appendix "B". This new material is only available in Quick Disconnect Couplings from Goodridge and also allows the use for fuel-alcohol mixtures, pure ethanol and vegetable oil.

Other materials as nitrile rubber (NBR), Ethylene-Propylene-Dien-rubber (EPDM) are available on request.

The operating temperatures are the following, dependent upon sealing material:

Material	Chemical description	Operating temperatures	Representative fluids
FPM B	Fluorocarbon, mod.	-20°C to +200°C	Fuel, ethanol, vegetable oil
NBR	Nitril-Butadien	-25°C to +120°C	Oils, mineral greases
EPDM	Ethlen-Propylen-Dien	-50°C to +150°C	Break fluids

Each coupling half is laser-labelled with Part-Nr. and sealing material (see part number guide).

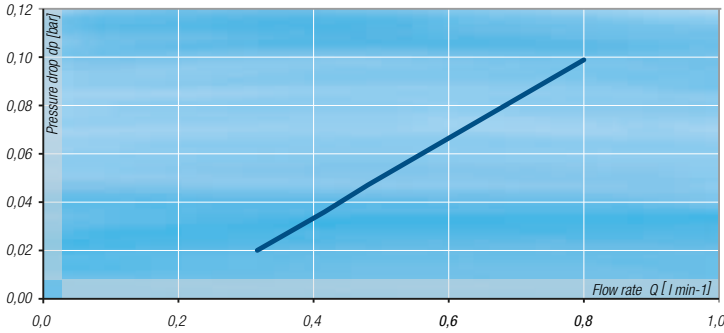
### Hydraulic ports

The hydraulic connection is unioned by a male thread with a conical seal of 37° according to MS 33656 (standard) or MS 33657 (bulkhead version).

Size	Nominal diameter	Threads
05	5mm	7/16-20 UNF or 9/16-18 UNF
08	8mm	9/16-18 UNF or 3/4 -16 UNF
11	11mm	3/4 -16 UNF or 7/8-14 UNF
14	14mm	7/8-14 UNF or 1-1/16-12 UNF

Of course any other connector style can be produced on request.

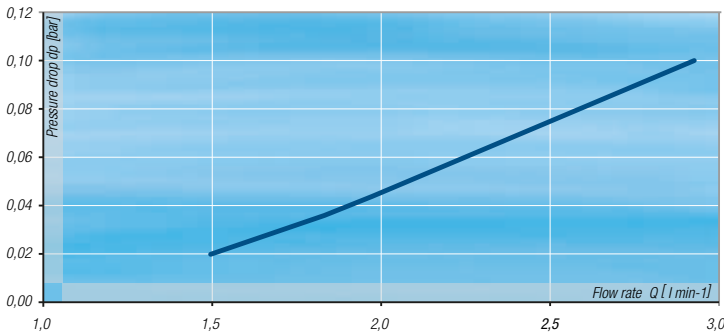
**G-Link Bayonet-Type - Flow Data**



Pressure drop - Flow rate G-Link QDD03B03E

— G-Link Bayonet 03AN3

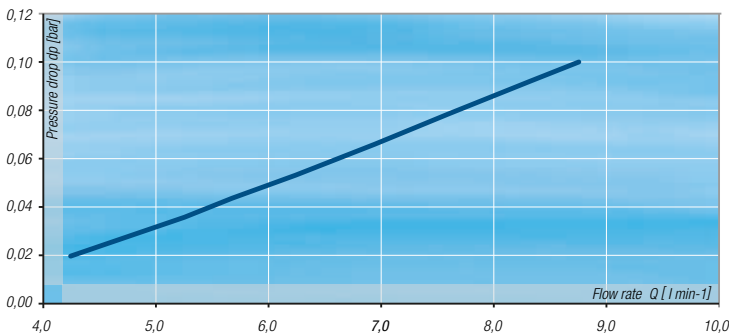
<b>PRODUCT</b>	QDV G-Link Bayonet
<b>SIZE - THREAD</b>	03 - AN3
<b>COUPLER</b>	QDD03BS03E
<b>NIPPLE:</b>	QDD03BP03E
<b>FLOW DIRECTION</b>	Coupler > Nipple
<b>TEST FLUID</b>	Water
<b>FLOW METER</b>	PE 10 I - Kern 150
<b>PRESSURE GAUGE</b>	Suku NG160, Kl. 0,6 n. DIN EN 837
<b>ANNOTATION</b>	



Pressure drop - Flow rate G-Link QDD05B04F

— G-Link Bayonet 05AN4

<b>Product:</b>	QDV G-Link Bayonet
<b>Size - Thread</b>	05 - AN4
<b>Coupler:</b>	QDD05BS04F
<b>Nipple:</b>	QDD05BP04F
<b>Flow direction:</b>	Coupler > Nipple
<b>Test fluid:</b>	Water
<b>Flow meter:</b>	PE 10 I - Kern 150
<b>Pressure gauge:</b>	Suku NG160, Kl. 0,6 n. DIN EN 837
<b>Annotation:</b>	

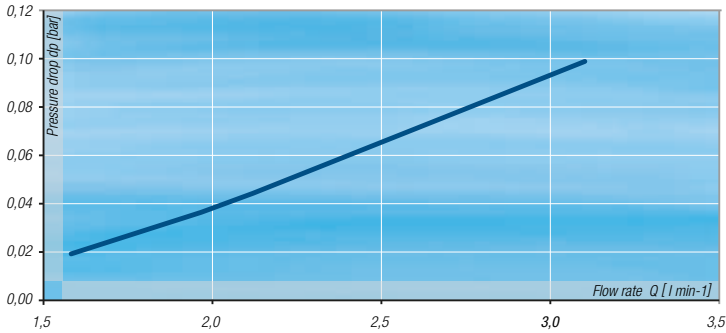


Pressure drop - Flow rate G-Link QDD08B06F

— G-Link Bayonet 08AN6

<b>PRODUCT</b>	QDV G-Link Bayonet
<b>SIZE - THREAD</b>	08 - AN6
<b>COUPLER</b>	QDD08BS06F
<b>NIPPLE:</b>	QDD08BP06F
<b>FLOW DIRECTION</b>	Coupler > Nipple
<b>TEST FLUID</b>	Water
<b>FLOW METER</b>	PE 10 I - Kern 150
<b>PRESSURE GAUGE</b>	Suku NG160, Kl. 0,6 n. DIN EN 837
<b>ANNOTATION</b>	

**G-Link Pull-Type - Flow Data**



Pressure drop - Flow rate G-Link QD05P04F

— G-Link Pull Type 05AN4

**PRODUCT**

QDV G-Link Pull Type

**SIZE - THREAD**

05 - AN4

**COUPLER**

GQD05PS04F

**NIPPLE:**

GQD05PP04F

**FLOW DIRECTION**

Coupler > Nipple

**TEST FLUID**

Water

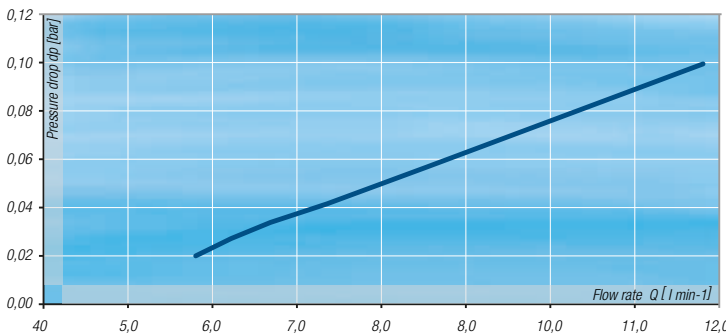
**FLOW METER**

PE 10 I - Kern 150

**PRESSURE GAUGE**

Suku NG160, Kl. 0,6 n. DIN EN 837

**ANNOTATION**



Pressure drop - Flow rate G-Link QD08P06F

— G-Link Pull Type 08AN6

**PRODUCT**

QDV G-Link Pull Type

**SIZE - THREAD**

08 - AN6

**COUPLER**

GQD08PS06F

**NIPPLE:**

GQD08PP06F

**FLOW DIRECTION**

Coupler > Nipple

**TEST FLUID**

Water

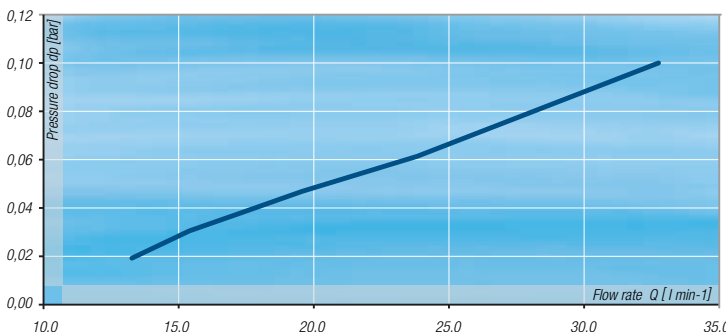
**FLOW METER**

PE 10 I - Kern 150

**PRESSURE GAUGE**

Suku NG160, Kl. 0,6 n. DIN EN 837

**ANNOTATION**



Pressure drop - Flow rate G-Link QD14P12F

— G-Link Pull Type 14 AN12

**PRODUCT**

QDV G-Link Pull Type

**SIZE - THREAD**

14 - AN12

**COUPLER**

GQD14PS12F

**NIPPLE:**

GQD14PP12F

**FLOW DIRECTION**

Coupler > Nipple

**TEST FLUID**

Water

**FLOW METER**

PE 10 I - Kern 150

**PRESSURE GAUGE**

Suku NG160, Kl. 0,6 n. DIN EN 837

**ANNOTATION**