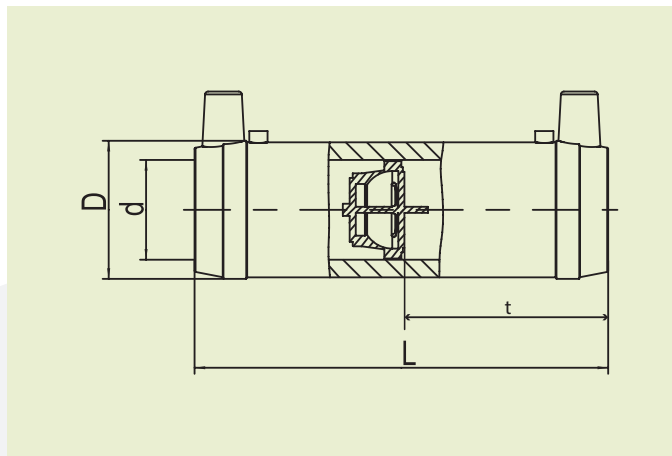


FRIALEN® SAFETY FITTINGS

FRIASTOPP LONG COUPLERS WITH INTEGRATED MERTIK MAXITROL EXCESS FLOW VALVE



PE 100 SDR 11

Maximum working pressure type Z, B: 5 bar (gas), type D: 1 bar (gas)



d	Type	Order Ref.	Stock-status	BX	PU	D	L	t	Operating pressure range p _{min} - p _{max}	VN	Weight kg/each
32	Z	616187	1	40	1280	45	136	65	35 mbar - 5 bar	17 - 40	0.140
40	Z	616188	1	30	960	54	146	71	35 mbar - 5 bar	26 - 62	0.220
50	Z	616189	1	16	512	68	175	85	35 mbar - 5 bar	41 - 99	0.380
63	Z	616190	1	10	320	82	197	96	35 mbar - 5 bar	66 - 158	0.530
32	D	616191	1	40	1280	45	136	65	25 mbar - 1 bar	11 - 16	0.140
40	D	616193	1	30	960	54	146	71	25 mbar - 1 bar	19 - 27	0.220
50	D	616195	1	16	512	68	175	85	25 mbar - 1 bar	28 - 40	0.380
63	D	616197	1	10	320	82	197	96	25 mbar - 1 bar	51 - 72	0.530
32	B	616192	1	40	1280	45	136	65	100 mbar - 5 bar	26 - 60	0.140
40	B	616194	2	30	960	54	146	71	100 mbar - 5 bar	39 - 90	0.220
50	B	616196	2	16	512	68	175	85	100 mbar - 5 bar	58 - 135	0.380
63	B	616198	2	10	320	82	197	96	100 mbar - 5 bar	94 - 219	0.530

FRIALEN safety fittings can be fused to pipes SDR 11 - SDR 17.6. Minimum wall thickness $s_{min} \geq 3$ mm. Other SDR-stages on request. Please observe the marking directly at the product, which is mandatory. DVGW-Registration No.

FRIALONG = DV-8601AU2248.

Excess flow valve = DG-4360BO0438.

The **universal type Z** meets perfectly the practical requirements of the operating pressure range and the required flow volume. Type Z boasts a surplus flow opening. Other types on request.

$p_{min} - p_{max}$: min. – max. operating pressure, i.e. incoming pressure Mertik Maxitrol.

VN: nominal flow for $p_{min} - p_{max}$, related to natural gas $d = 0.6$ in standard condition (1013.25 mbar, 15 °C) in m³/h.

Type D, Z: Mertik Maxitrol with surplus flow device, maximum surplus flow volume D: 30 l/h with 100 mbar, Z: 30 l/h with 1 bar.

Type B: Mertik Maxitrol without surplus flow device, maximum leak rate 3.0 l/h.

FRIALEN® SAFETY FITTINGS

FRIASTOPP LONG COUPLERS WITH INTEGRATED MERTIK MAXITROL EXCESS FLOW VALVE

Areas of Application

FRIASTOPP is used for gas and service lines according to DVGW G459-1 appendix (12/03) with operating pressure from 25 mbar – 5 bar. FRIASTOPP is a safety device which automatically cuts off the gas flow in the event of pipe damage, e.g. caused by dredging or drilling. FRIASTOPP is best installed in the branch between mains and service line, immediately behind the service line valve. The Mertik Maxitrol type selection takes place according to the minimum operating pressure of the network and the required flow output based on consumption.

The **universal type Z** meets perfectly the practical requirements of the operating pressure range and the required flow volume. Type Z boasts a surplus flow opening.

Functions

(see also info sheet on technical data “excess flow valve SENTRY GS for underground external pipe systems by Mertik Maxitrol). FRIASTOPP is subdivided into types D, B or Z depending on mains pressure range. It cuts off automatically at a defined gas flow volume as typically occurs when a gas service line is damaged. Gas flow is cut off instantaneously and completely. The types D and Z have surplus flow devices. The surplus flow amount here allows the pressure in the intact gas pipe to rise again to allow the gas flow monitor system to reopen automatically.

Type D, Z: Mertik Maxitrol with surplus flow device: surplus flow amounts of over 30 l/h require according to DVGW-G459-1-B additional passive safety measures in the building. Type B without surplus flow opening is reopened by the application of counter pressure (ca. network pressure). It does not need to be made accessible again for this purpose.

Advice on Processing

FRIASTOPP is to be processed according to the installation and operating procedures. Constricting the gas route by means of FRIASTOPP is authorised up to 10 bar if the excess flow valve is open.

The initial mains pressure of the component may be read on the data plate:

- yellow data plate (Type Z) for 35 mbar to 5 bar,
- orange data plate (Type D) for 25 mbar to 1 bar,
- white data plate (Type B) for 100 mbar to 5 bar.

The use of this component should be marked at the main shut-off device of the building (appropriate label or ID card is included with the delivery). Fusion of FRIASTOPP with the HD-PE service line takes place using the FRIALEN fusion process – leakproof and longitudinally strong. Installation is prepared according to the general installation requirements (see “Assembly Instructions” for “FRIALEN Safety Fittings for house connections and distribution pipes up to d225”), i.e. remove oxidic layer and clean.

Good reasons for using FRIASTOPP:

- Factory made combination made from FRIALEN FRIA-LONG long coupler and Mertik Maxitrol excess flow valve
- The reduction in the cold zones by the integrated GS is more than compensated in comparison with the standard coupler
- Increased installation safety when using coiled pipes in domestic connections
- The exposed heating coil and the extra wide fusion zones ensure optimum heat transmission
- Additional barcode for tracing back the underground fitting (Traceability-Coding)

The excess flow valve

- has been adjusted precisely in the factory (VN)
- has low pressure loss
- is largely resistant to pollutants in the gas
- has been successfully applied many thousand times in Germany using these principles
- has pressure increase from low to medium pressure possible with suitable network
- Type Z: can be applied universally from 35 mbar to 5 bar, simple storage, no danger of confusion, low operational training cost