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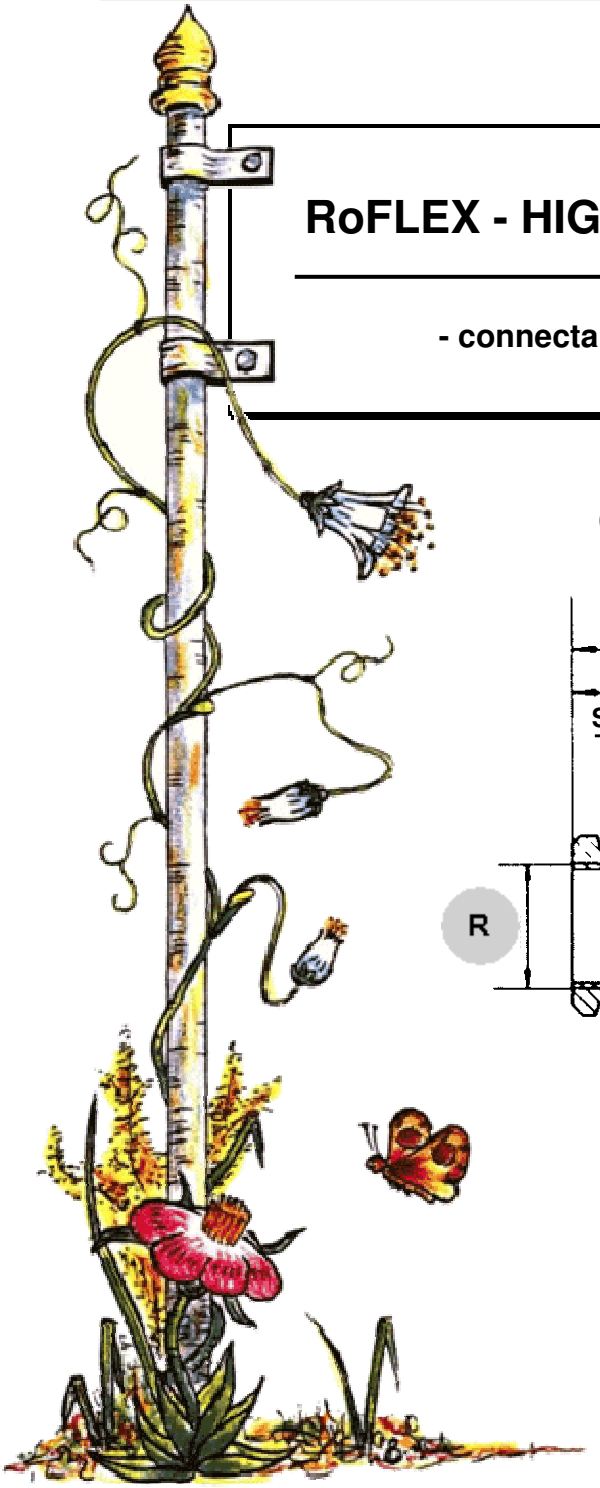
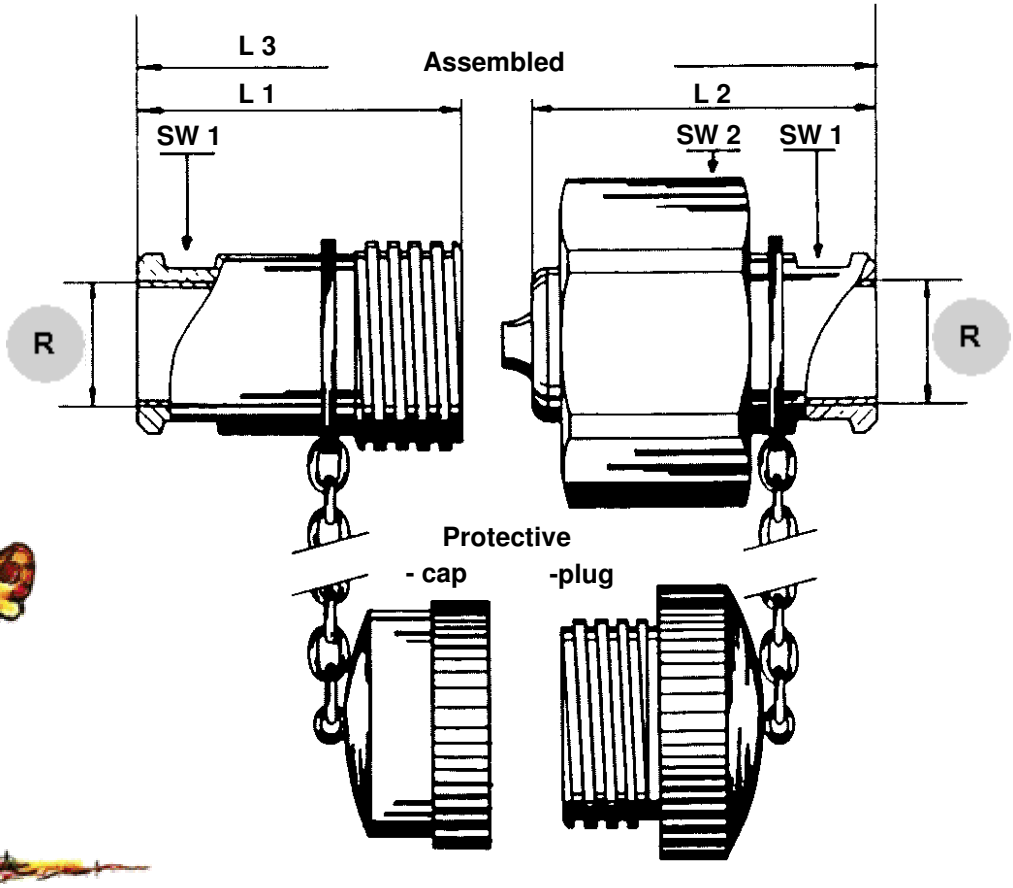


# RoFLEX - HIGH PRESSURE - SCREW COUPLINGS

**- connectable and disconnectable under full pressure -**

## Part "A"
(**A**ussengewinde)

## Part "S"
(**S**echskantmutter)




| RoFLEX Thread size R | L 1 mm | L 2 mm | L 3 mm | SW 1 mm | SW 2 mm | Minimum flow area mm2 | L/Min. @ 2 Bar ΔP | Working pressure (security 4:1) Bar | PSI |
|---|---|---|---|---|---|---|---|---|---|
| Ro 3/8″ | 77 | 55 | 110 | 22 | 45 | 45 | 33 | 500 | 7250 |
| Ro 1/2″ | 95 | 70 | 135 | 26 | 50 | 95 | 66 | 450 | 6520 |
| Ro 3/4″ | 99 | 73 | 142 | 30 | 55 | 150 | 84 | 400 | 5800 |
| Ro 1″ | 106 | 82 | 158 | 40 | 70 | 250 | 179 | 350 | 5070 |
| Ro 1 1/4″ | 118 | 88 | 172 | 48 | 80 | 370 | 224 | 320 | 4640 |
| Ro 1 1/2″ | 121 | 90 | 176 | 55 | 87 | 500 | 283 | 300 | 4350 |
| Ro 2″ | 165 | 120 | 240 | 76 | 130 | 980 | 358 | 250 | 3620 |

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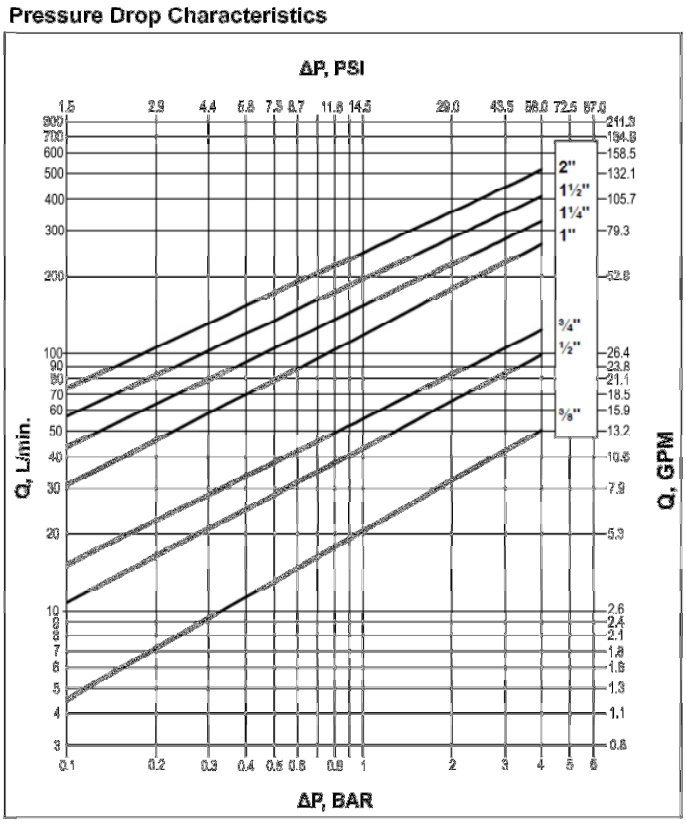
# Pressure Drop Characteristics - ISO 7241 Part 2

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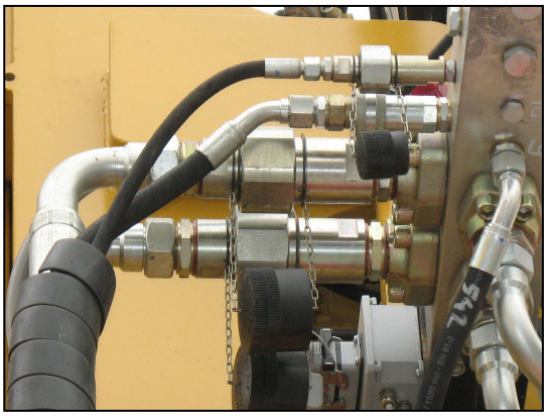
| Delta P | Ro Designition BSP/R | | | | | | |
|---|---|---|---|---|---|---|---|
| Bar | Ro 3/8" | Ro 1/2" | Ro 3/4" | Ro 1" | Ro 1.1/4" | Ro 1.1/2" | Ro 2" |
| 0.1 | 4.5 | 10.8 | 15.2 | 30.8 | 43.7 | 57.0 | 73.3 |
| 0.3 | 9.3 | 20.9 | 28.3 | 58.7 | 79.5 | 102.6 | 131.0 |
| 1 | 20.5 | 43.2 | 56.1 | 118.8 | 153.2 | 195.2 | 247.7 |
| 2 | 32.3 | 65.5 | 83.3 | 178.3 | 223.5 | 282.8 | 357.4 |
| 3 | 42.1 | 83.6 | 104.9 | 226.1 | 278.7 | 351.2 | 442.9 |
| 4 | 50.8 | 99.4 | 123.5 | 267.6 | 326.0 | 409.6 | 515.6 |
| 6 | 66.3 | 126.9 | 155.6 | 339.3 | 406.7 | 508.8 | 639.0 |



ISO 7241 Part 2
Hydraulic Oil ISO 32
Temperature 40°C
Viscosity 32 cSt

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# RoFLEX - HIGH PRESSURE - SCREW COUPLINGS

## - The Special Coupling with black caps and robust thread -

This coupling is specially designed to withstand above average vibrations and pressure on equipment such as hydraulic hammers, crushers ect. They are manufactured in 7 standard sizes:

| RoFLEX Thread size BSPP / R | L / Min. @ 2 Bar ΔP | | | Working pressure (security 4:1) | |
|---|---|---|---|---|---|
| | UK Gallons | US Gallons | Litres/min. | psi | bars |
| Ro 3/8″ | 7.3 | 8.8 | 33 | 7250 | 500 |
| Ro 1/2″ | 14.6 | 17.5 | 66 | 6520 | 450 |
| Ro 3/4″ | 18.5 | 22.2 | 84 | 5800 | 400 |
| Ro 1″ | 39.4 | 47.3 | 179 | 5070 | 350 |
| Ro 1 1/4″ | 49.3 | 59.2 | 224 | 4640 | 320 |
| Ro 1 1/2″ | 62.3 | 74.8 | 283 | 4350 | 300 |
| Ro 2″ | 78.8 | 94.6 | 358 | 3620 | 250 |

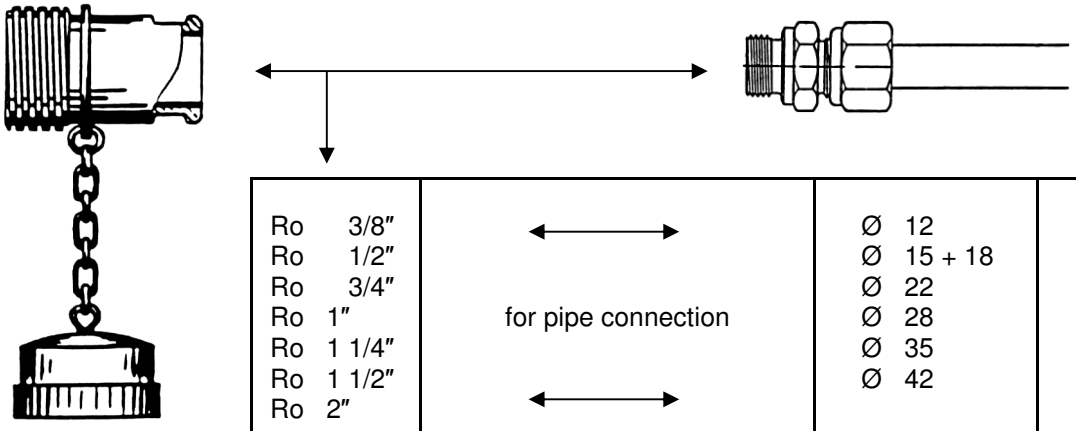
**In order to obtain the optimum working life of the coupling, it is important to observe the following two points:**

1. Determine the correct size of coupling for your application. **DO NOT** use too small coupling sizes. Rather use one size bigger to avoid too much backpressure, too much oil heat ect., especially for the return line.

2. The assembled coupling (part no. 5007) should be lightly tightened, using the spanner (part no. 5003), so that the nut will not loosen under severe operating conditions, as for example with Hydraulic hammer.

**If these two points are NOT followed as described, the VITON seal of the sealing valve could be damaged through excessive oil flow rates.**

If there is chosen the right size of the coupling with the relevant oil flow rate, you will also have the corresponding Light- and Heavy series pipe sizes to suit the screw coupling:

| RoFLEX - Coupling (for example part "A") | Metric cutting ring connector 24°-cone / DIN 2353 | L (Light-series) mm | S (Heavy-series) mm |
|---|---|---|---|
|  | | | |
| Ro 3/8″<br>Ro 1/2″<br>Ro 3/4″<br>Ro 1″<br>Ro 1 1/4″<br>Ro 1 1/2″<br>Ro 2″ | for pipe connection | Ø 12<br>Ø 15 + 18<br>Ø 22<br>Ø 28<br>Ø 35<br>Ø 42 | Ø 10 + 12<br>Ø 14 + 16<br>Ø 20<br>Ø 25<br>Ø 30<br>Ø 38<br>Ø 50 |

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# Accessories for
# RoFLEX – HIGH PRESSURE - SCREW COUPLINGS

## Spanner
(part no. 5003)

To prevent the nut loosening under severe vibrating conditions, it is essential, that the nut is lightly tightened using the special spanner provided:

| Article no. | RoFLEX part no. |
|---|---|
| 103540 | **5003 - 3/8"** |
| 103541 | **5003 - 1/2"** |
| 103542 | **5003 - 3/4"** |
| 103543 | **5003 - 1"** |
| 103544 | **5003 - 1 1/4"** |
| 103545 | **5003 - 1 1/2"** |
| 103546 | **5003 - 2"** |

## Clamping device
(part no. 5001)

The coupling should be held with the clamping device to prevent it from turning when screwing together the coupling parts "A" and "S". The same applies, when fitting the pipe connector to the coupling part "A" or "S":

| Article no. | RoFLEX part no. |
|---|---|
| 103533 | **5001 - 3/8"** |
| 103534 | **5001 - 1/2"** |
| 103535 | **5001 - 3/4"** |
| 103536 | **5001 - 1"** |
| 103537 | **5001 - 1 1/4"** |
| 103538 | **5001 - 1 1/2"** |
| 103539 | **5001 - 2"** |

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