

FLUID CONDUCTING QUICK DISCONNECT COUPLING

**SELF SEALING
5000 P.S.I.**

SIZES: 3/4 TO 3 INCH

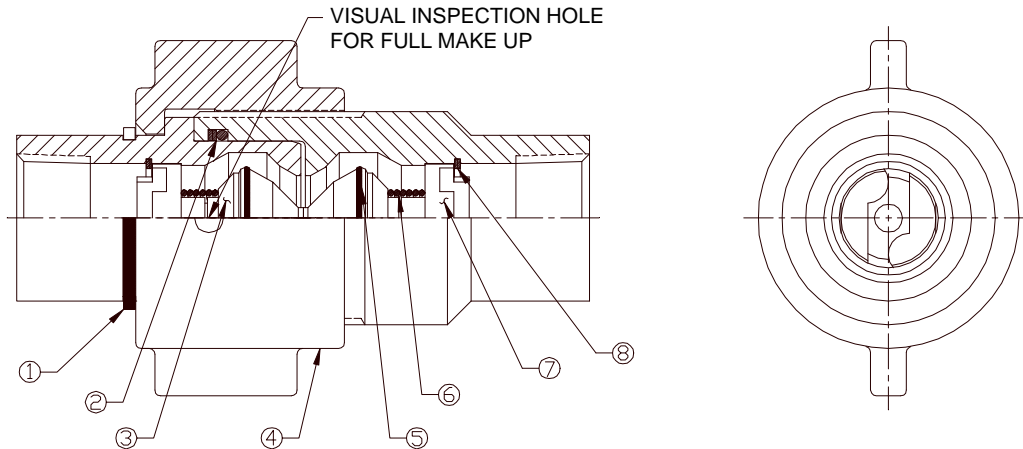
HYDRAULICS *Inc.*

2935 ST. LOUIS AVENUE
FORT WORTH, TEXAS 76110



PRODUCT DATA — 5TV SERIES COUPLINGS

The 5TV series high pressure hydraulic coupling is designed for rugged hydrostatic drive applications in the mining and oil industries. Service in many such applications has proven the design compatible to extreme pressures, structural and system induced shockloads. The construction makes the coupling attractive in applications having low operating pressures. **NOTE** — Not for use with gaseous fluids.



1 NUT RETAINER RING

2 NIPPLE SEAL (O-RING/BACK UP RING)

3 POPPET VALVE

4 HIGH STRENGTH CAST STEEL NUT

5 VALVE SEAL SWAGED IN AGAINST WASHOUT

6 VALVE SPRING

7 EXCLUSIVE FOUR POINT CONTACT POPPET GUIDE

8 2-TURN LOCK RING

OPERATING LIMITS

- 5,000 P.S.I. operating pressure — all sizes
20,000 P.S.I. minimum burst — coupled
- Vacuum to 28" Hg
- Standard seal — temperature range — 40°F to +250°F
- Buna-N seals — standard

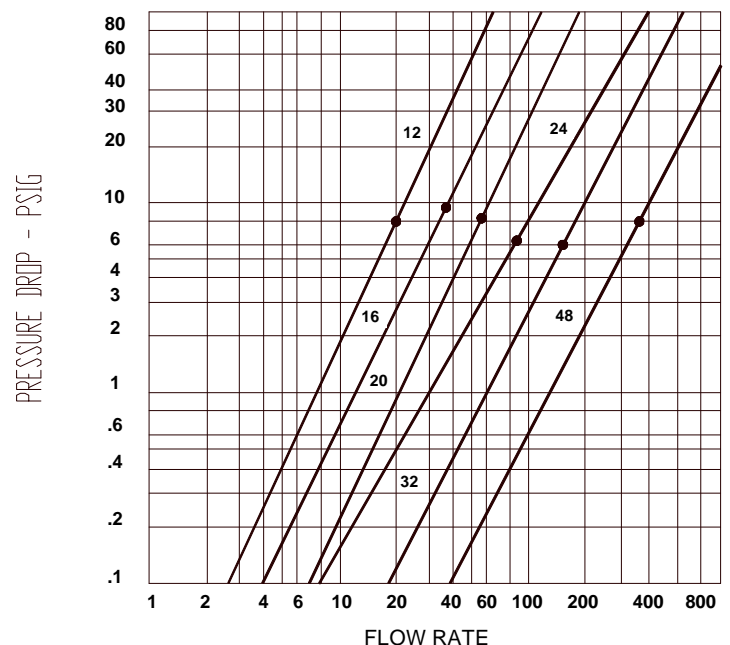
DESIGN FEATURES

- Excellent flow characteristics for continuous duty applications. See flow chart.
- High strength steel poppet guides prevent break up and washout of coupling valving during high surge and shock conditions.
- Exclusive four point support design of poppet guide provides positive alignment of valving during surging flow conditions
- Flat crested stub-acme threads and all steel construction withstand storage and rig-up damage.
- Protective treatment equal to industry standards for SAE steel hose fittings
- Structurally compatible with weight of 5,000 P.S.I. flex-hose and system induced shockloads.

SIZES AND CONNECTION TYPE

- 3/4" thru 3" — female NPTF pipe thread

PRESSURE DROP vs FLOW (GPM) —

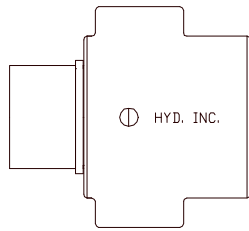


- Pressure drop thru coupling based on flow giving 15 FPS fluid velocity thru nominal bore size.

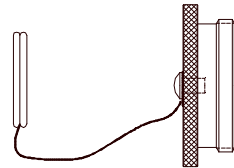
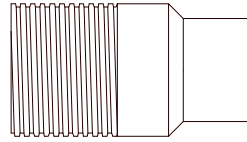


HIGH PRESSURE HYDRAULIC COUPLINGS

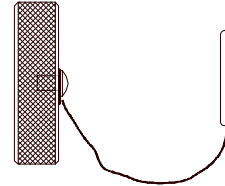
COUPLER



NIPPLE



DUST PLUG



DUST CAP

ASSEMBLY PART NUMBERS					REPAIR PARTS PART NO.	
COUPLING PART NO.	NIPPLE PART NO.	COUPLER PART NO.	DUST PLUG PART NO.	DUST CAP PART NO.	VALVE ASS'Y *PART NO.	NIPPLE SEAL PART NO.
5TV-CN-12	5TV-N-12	5TV-C-12	5TV-DP-12	5TV-DC-12	5TV-VA-12	5TV-NS-12
5TV-CN-16	5TV-N-16	5TV-C-16	5TV-DP-16	5TV-DC-16	5TV-VA-16	5TV-NS-16
5TV-CN-20	5TV-N-20	5TV-C-20	5TV-DP-20	5TV-DC-20	5TV-VA-20	5TV-NS-20
5TV-CN-24	5TV-N-24	5TV-C-24	5TV-DP-24	5TV-DC-24	5TV-VA-24	5TV-NS-24
5TV-CN-32	5TV-N-32	5TV-C-32	5TV-DP-32	5TV-DC-32	5TV-VA-32	5TV-NS-32
5TV-CN-40	5TV-N-40	5TV-C-40	5TV-DP-40	5TV-DC-40	5TV-VA-40	5TV-NS-40
5TV-CN-48	5TV-N-48	5TV-C-48	5TV-DP-48	5TV-DC-48	5TV-VA-48	5TV-NS-48

*INCLUDES POPPET, POPPET GUIDE, SPRING AND RETAINER FOR ONE HALF ONLY

COUPLING PART NO.	DIMENSIONS				THREAD SIZES	WEIGHT POUNDS
	COUPLING LENGTH	NIPPLE LENGTH	COUPLER LENGTH	DIM. ACROSS WING NUT	FEMALE PIPE THREAD	"CN"
5TV-CN-12	4.86	3.27	2.84	3.00	¾-14	2
5TV-CN-16	6.05	4.18	3.35	3.75	1-11½	5
5TV-CN-20	7.75	5.35	4.42	4.50	1¼-11½	9
5TV-CN-24	8.62	5.97	5.02	4.75	1½-11½	14
5TV-CN-32	10.00	7.05	6.07	6.25	2-11½	28
5TV-CN-40	12.00	8.70	6.94	8.00	2½-8	65
5TV-CN-48	14.81	10.60	9.25	9.75	3-8	148

"Because of technological progress and product improvements, all design and dimensional data shown in this catalog is subject to change without notice. Technical information has been prepared from actual test results under controlled environmental conditions and data is considered to be reliable, but no responsibility can be assumed for its accuracy under varied field conditions."



HC-100



HC-104A



HC-103

HYDRAULICS *Inc.*

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CONTACT OUR FORT WORTH OFFICE FOR ADDITIONAL
PRODUCT INFORMATION • SWIVELS, COUPLINGS, AND
CONTROLS FOR HYDRAULIC SYSTEMS • ASK FOR THE
NEAREST REPRESENTATIVE.

